Deutsche Bank
Markets Research

Global

Rates

Global Fixed Income Weekly

Date
3 November 2017

The blind leading the blind

Francis Yared
+44-20-754-54017

Laura Desplans, PhD
+1-212-250-7583

Jack Di-Lizia
+44-20-754-51865

Markus Heider
+44-20-754-52167

Aleksandar Kocic
+1-212-250-0376

Soniya Sadeesh
+44-20-754-73091

Stuart Sparks
+1-212-250-0332

Bernd Volk
+41-44-227-3710

Steven Zeng, CFA
+1-212-250-9373

- The Bank of England tightened dovishly by endorsing current market pricing. This guidance could be subject to swift change, however, given that the BoE faces binary political events and the complexity of a combined supply and demand shock.
- The US tax reform process has entered its difficult phase as revenue raising measures remain politically controversial. Given the tacit agreement for a USD1.5trn 10-year deficit increase and the political calendar, there should be a consensus to deliver a smaller unfunded tax cut. This is not priced in, but it may not become tangible before early next year.
- Many valuation metrics suggest that European fixed income is no longer cheap relative to the US.
- We remain tactically and strategically bearish, and look for 10y yields to rise to 2.60% by year end, driven primarily by market re-pricing for a higher terminal real short rate.
- We expect Powell's nomination as Fed chair to have little impact on the Fed's short rate trajectory, but see his nomination as positive for the prospects for regulatory reform, particularly with regard to eSLR reform as proposed by the Treasury in June.
- The term premium remains sticky, and has shown little reaction to the release of details of the House Republicans' tax reform bill. We expect a $1.5 trillion increase in the deficit over 10 years to be the "bottom line"; that is, if particular revenue-generating measures prove politically impossible, we expect tax relief to be scaled back such that the plan's impact on the deficit is unchanged.
- The market impact of the tax plan could well be masked by persistent demand by international investors and the pension community. The relative performance of equities and fixed income continues to suggest substantial re-balancing demand from defined benefit pension investors, and recent dollar weakness has likely engendered foreign demand for Treasuries by investors expecting a recovery in the dollar.

Table Of Contents

Bond Market Strategy

- The Bank of England tightened dovishly by endorsing current market pricing. This guidance could be subject to swift change, however, given that the BoE faces binary political events and the complexity of a combined supply and demand shock
- The US tax reform process has entered its difficult phase as revenue raising measures remain politically controversial. Given the tacit agreement for a USD1.5trn 10-year deficit increase and the political calendar, there should be a consensus to deliver a smaller unfunded tax cut. This is not priced in, but it may not become tangible before early next year
- Many valuation metrics suggest that European fixed income is no longer cheap relative to the US

Francis Yared
Strategist
(+44) 020 754-54017
francis.yared@db.com

Sukanto Chanda
Strategist
+44-20-754-52461
sukanto.chanda@db.com

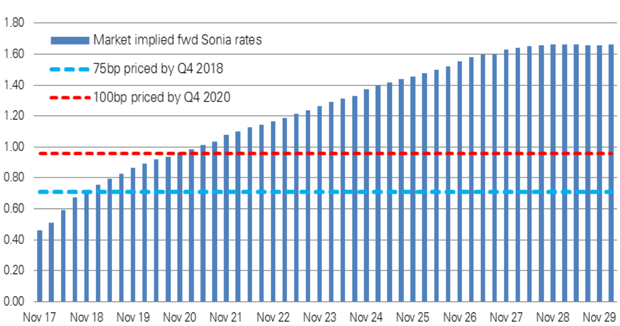
Jack Di-Lizia
Strategist
(+44) 20 754-51865
jack.di-lizia@db.com

The blind leading the blind

UK: The blind leading the blind

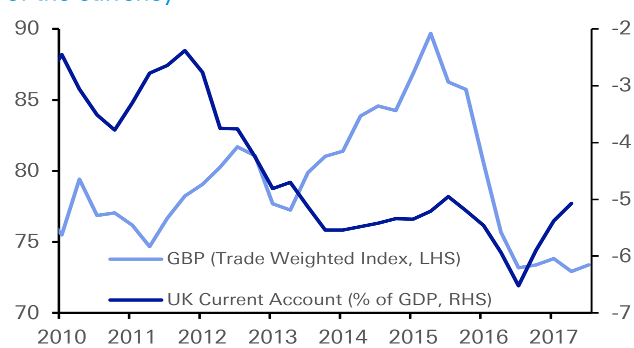
The Bank of England followed the footsteps of the ECB by delivering a dovish tightening. The MPC meeting was dovish primarily because the BoE endorsed current market pricing. Carney also reiterated that the BoE expected the hiking cycle to be gradual and shallow. This led the market to move out the timing of the next 25bp hike from Aug-18 to early 2019.

Figure 1: Timing of the next 25bp BOE hike pushed out to 2019



Source: Deutsche Bank, Bloomberg Finance LP

Figure 2: The UK current account has been revised lower and is not being resorbed despite a sharp depreciation of the currency



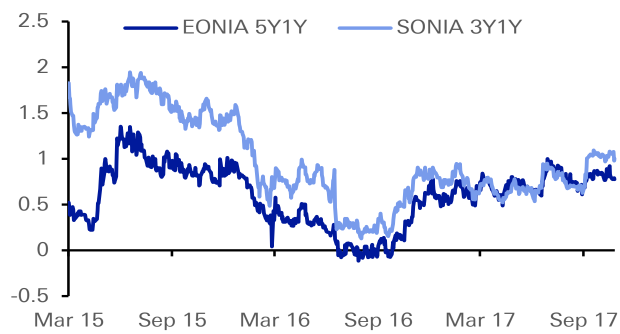
Source: Deutsche Bank, Bloomberg Finance LP

Now that the BoE is behind us, some may be tempted to rely on the BoE's endorsement of current market pricing to consider entering into carry trades. While carry may work in the short-term, there are inherent risks to such trades.

First, the BoE acknowledged that its future policy decisions will be heavily influenced by the outcome of Brexit negotiations and the completion of a transition deal. In practice, the UK government has limited bargaining power and the benefit of a transition deal would be diminished if it is delayed beyond the end of this year. Hence, it remains likely that a transition deal (on terms close to the EU position) will be agreed this year.

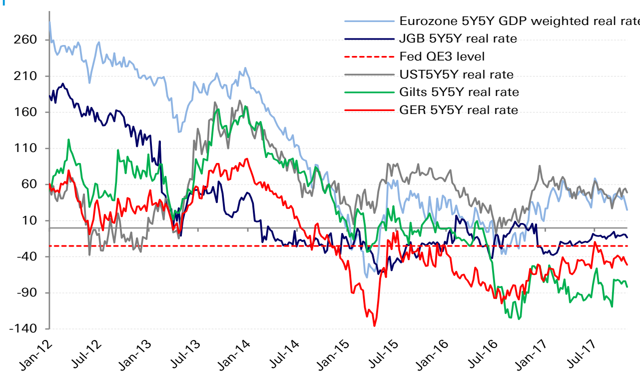
Second, and more importantly, a hard Brexit would constitute both a negative supply and a negative demand shock. The UK runs a current account deficit that has not been resorbed despite a significant depreciation of the currency (see graph above). Thus, if the impact of a hard Brexit on growth is unambiguously negative, the impact on inflation is unclear. As a result, the monetary policy response to a hard Brexit is also less obvious. The BoE's decision to reluctantly hike this week despite weaker growth is a case in point. On the other hand, the pressure to resort to fiscal policy is growing and it is likely to increase even more in the event of a hard Brexit. Moreover, given the current political situation, a hard Brexit is likely to result in the increased probability of a Labour victory.

Figure 3: Terminal rate priced in the UK is less than 25bp above the Eurozone



Source: Deutsche Bank, Bloomberg Finance LP

Figure 4: 5Y5Y real rates in the UK are very low on a cross market basis



Source: Deutsche Bank, Bloomberg Finance LP

From this perspective, one should be wary about overly relying on the BoE's endorsement of current market pricing. The mix of a (1) a binary political outcome, (2) supply and demand shocks and (3) a current account deficit that is immune to a decline in the currency does not make the BoE's decision making process straightforward. From this perspective, the BoE forward guidance is akin to the blind leading the blind.

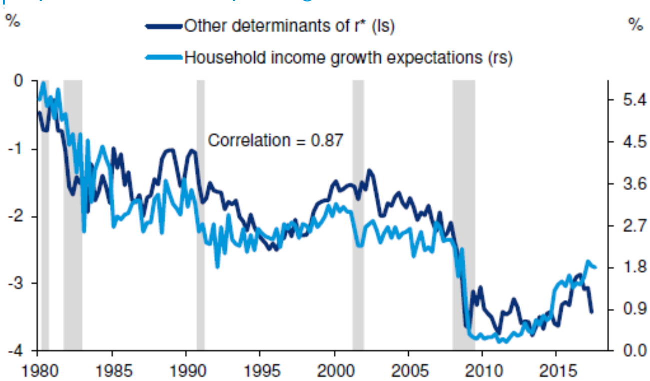
Relative to this uncertainty and fundamentals, current market pricing of a terminal rate marginally above the ECB (left graph above) and 5Y5Y real rates deeply in negative territory (right graph above) and about 125bp through the US (assuming a 100bp RPI-CPI wedge) are not adequate compensation for risks. Gilts remain very expensive even if the BoE was more dovish than anticipated.

US: Converging to the lower tax bound

The House Ways and Means Committee release of its tax reform legislation overshadowed the well-advertised nomination of Jerome Powell as the new Fed Chair. Throughout the official search process, we argued that Powell was a reasonable compromise as (a) he ensured continuity of monetary policy, (b) he has indicated some flexibility on regulatory policies, (c) he is a Republican and (d) he is a non-academic.

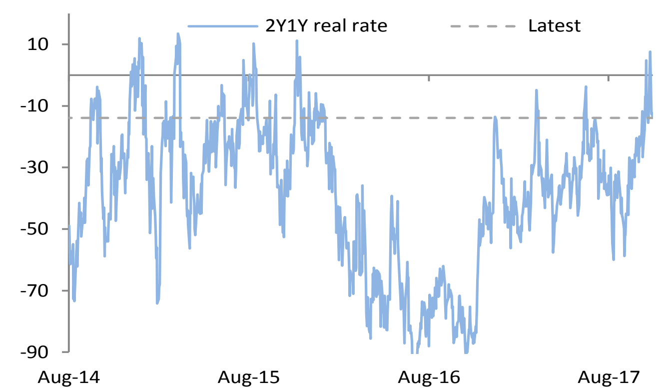
We had "budgeted" a potential 5-10bp rally on his nomination given the relatively high odds attributed to Taylor a week ago. However, beyond the initial reaction, the risks to the pricing of the terminal rate remain to the upside from a medium term perspective because: (a) the Fed has delivered on its tightening plan this year despite weaker core inflation, (b) the current Fed leadership is looking for 3 hikes next year (reaching our terminal rate assumption), (c) the Fed composition is likely to shift slightly to the hawkish side, (d) core inflation will benefit from tailwinds from Q2-18 onward (lagged impact of a weaker USD and higher commodity prices and base effects), (e) the odds are still geared towards the US administration adopting mildly reflationary policies (tax cuts and easier regulation and a marginal risk of protectionist measures and/or infrastructure spending), and (f) as argued by our economists (Link), r* is likely to increase as income expectations are improving (left graph below). As such, current pricing of the terminal rate remains benign (right graph below).

Figure 5: R-star is likely to increase as income expectations are improving



Source: Deutsche Bank Research (Fig 12, US Economic Perspectives, 26 Oct 2017), FRB, UMichigan, Haver

Figure 6: Market pricing of r-star remains benign



Source: Deutsche Bank, Bloomberg Finance LP

From a market perspective, progress on tax reform is more relevant than the nomination of the Fed Chair. The plan unveiled by the House Ways and Means Committee amounts to a USD1.5trn increase in deficits for the 2018-2027 period (tables below). This is consistent with the 2018 budget passed by the House and the Senate. After allocating the AMT impact, individuals would benefit from USD 961bn and Corporates the remaining USD 559bn.

The revenue raising measure amounts to USD 4.2trn: USD 3trn for individuals and USD 1.2trn for corporates. The revenues raising measures are likely to prove to be the most controversial. On the personal tax side, state and local deductions and mortgage interest deduction for individuals are likely to be the most problematic. The tax plan does not provide specific estimates of the revenue raised by these two measures. However, a recent CBO analysis [Link] suggests that limiting State and Local Tax deductions are likely to represent a significant proportion of the revenues raised (estimates upto ~USD 1trn) while converting mortgage interest deductions to a 15% tax credit could raise ~USD 100bn. On the corporate side, the deduction of interest paid could be controversial. However, it "only" amounts to USD170bn. Thus, the key sticking point for the new tax plan is likely to arise from revenue raising measures which are both material and politically sensitive. This singles out first and foremost the state and local tax deduction.

Figure 7: Increase in costs due to tax reform (2018-2027)

Tax Reform for Individuals	(in bn)
Reform of Rates, Standard Deduction, and Exemptions	859
Simplification and Reform of Family and Individual Tax Credits	613
Simplification and Reform of Education Incentives	(65)
Simplification and Reform of Deductions[1]	(1,261)
Simplification and Reform of Exclusions and Taxable Compensation	(37)
Simplification and Reform of Savings, Pensions, Retirement	(14)
Estate and Generation-skipping Transfer Taxes	172
Alternative Minimum Tax Repeal (Individual)	696
Total increase in costs due to individual tax reform	**961**
Tax Reform for Corporates and Organizations	**(in bn)**
Reduction in corporate tax rate	1,462
Reform of Business-related Exclusions, Deductions, etc.	(513)
Other tax reforms[2]	(141)
Taxation of Foreign Income and Foreign Persons	(285)
Exempt Organizations	(3)
Alternative Minimum Tax Repeal (Corporate)	40
Total increase in costs due to business tax reform	**559**
Total increase in costs	**1,520**

Source: Deutsche Bank, US House of Representatives

Figure 8: Revenue reduction and raising measures

Revenue reduction measures	(in bn)
Individuals	3,928
Corporates	1,798
Total Revenue Reduction Measures	**5,726**
Revenue Raising measures	**(in bn)**
Individuals	(2,967)
Corporates	(1,239)
Total Revenue Raising Measures	**(4,206)**
Total reduction (increase) in revenues from individuals	961
Total reduction (increase) in revenues from corporates & organizations	559
Total reduction (increase) in revenues	**1,520**

Source: Deutsche Bank, US House of Representatives

The revenue raising measures represent an important hurdle to overcome. However, one should not lose sight that Republicans in the Senate and the House have in principle agreed to a package that would result in the above mentioned USD1.5trn. Also, from a political perspective, Republicans have a strong incentives to pass some form of tax plan ahead of the mid-term elections. Finally, unlike healthcare, immigration or infrastructure spending, aiming to reduce taxes is one of the most consistent features of the GOP. As demonstrated by previous Republican administrations, tax cuts take even precedence over reducing deficits.

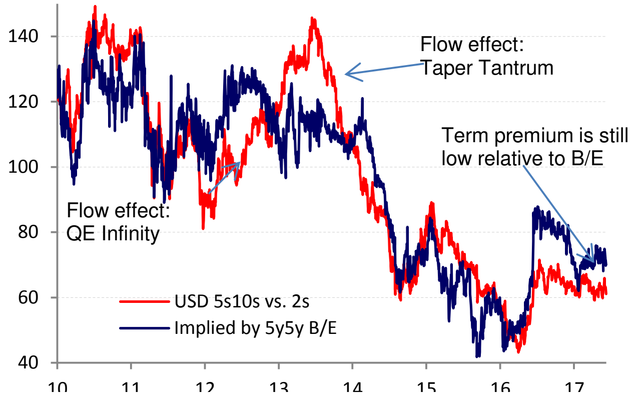
Thus, if the revenue raising measures prove to be politically difficult, Republicans are more likely to reduce the scale of the tax cuts accordingly rather than completely abandon the tax plan. The plan would be scaled down, but its net fiscal impact (USD1.5trn over 10 years) would not change. Moreover, given the political need to show results ahead of next year's election, Republicans are more likely to consider front-loading the cuts (e.g. by envisaging to scale them back in outer years to fit the budget constraint).

In short, a smaller front-loaded and unfunded tax cut amounting to USD1.5trn increase in deficits over 10 years should represent the "lower bound" of the tax plan. There will be some upside if the expected political hurdles are overcome converting the tax cuts into a more comprehensive tax reform.

Even if we ignore the potential economic benefits of the tax plan, its impact on bond markets should still be relevant from a supply/demand perspective. Comparing 5Y5Y breakevens with the term premium (defined as the USD5s10s slope beta weighted with a 20% short in 2s) provides a simple way of assessing the market's pricing of supply/demand factors. Indeed, the USD5s10s slope should be broadly determined by (a) the Fed cycle, (b) the inflation outlook and (c) supply/demand factors. By focusing on the USD5s10s slope beta hedged with a short 20% in 2s, we adjust for the directionality of the slope for the Fed cycle. By then comparing this measure of the term premium with 5y5y breakevens, we isolate supply/demand factors. As can be seen in the graph below, in the post QE infinity world, the major deviations between the term premium and 5y5y breakevens have coincided with shocks to the supply/demand dynamics

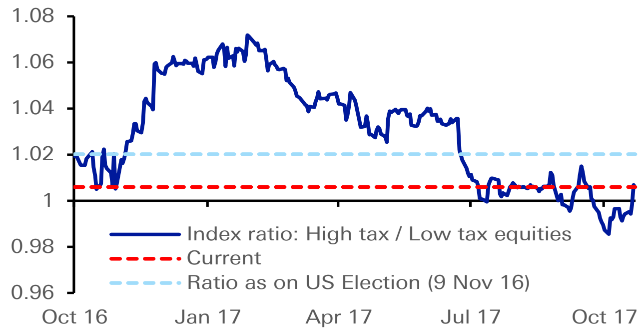
(QE infinity, taper tantrum etc.). Currently, the term premium is low relative to breakevens, which suggests that the market is not pricing much in terms of fiscal outcome. A basket of high tax vs. low tax companies (industry neutral) does indicate that the market has recently priced a more positive outcome, but the overall level of the basket is still at the levels observed before the US election. From a market perspective, we continue to see the environment conducive to a higher, albeit delayed, term premium.

Figure 9: US term premium still low relative to breakevens



Source: Deutsche Bank, Bloomberg Finance LP

Figure 10: Market pricing a more positive fiscal outcome, but still below levels observed before the US election



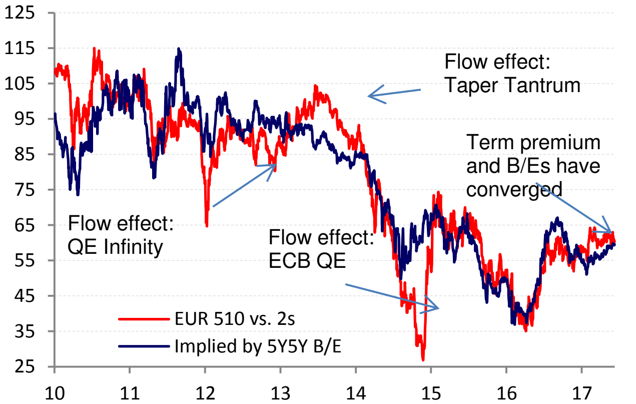
Source: Deutsche Bank, Bloomberg Finance LP

EUR: Eurozone fixed income is less attractive

Since Sintra, we have highlighted that Eurozone fixed income was cheap relative to other markets. Several valuation metrics suggest that this is no longer clearly the case (with the notable exception of Gilts).

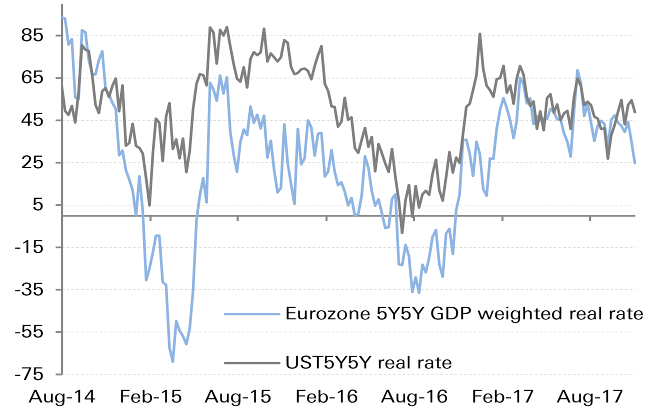
First, as we highlighted last week, the front-end has limited room to rally as the market has priced out any hike until Sept-18 and the first full 25bp hike is priced for Jan-20. Second, unlike in the US, the term premium in Europe was high relative to breakevens. This is no longer the case (graph below). Third, EUR5Y5Y GDP-weighted real rates vs. the US were at a post QE high. They are now at a 2017 low (graph below).

Figure 11: Term premium in Europe no longer high relative to breakevens



Source: Deutsche Bank, University of Michigan, Federal Reserve, Haver

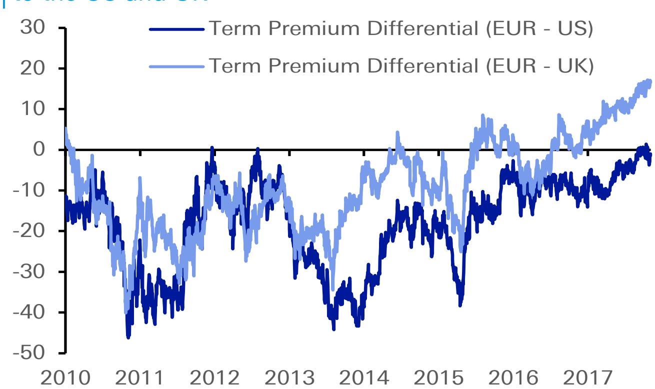
Figure 12: EUR5Y5Y GDP-weighted real rates vs. the US are at YTD lows



Source: Deutsche Bank, Bloomberg Finance LP

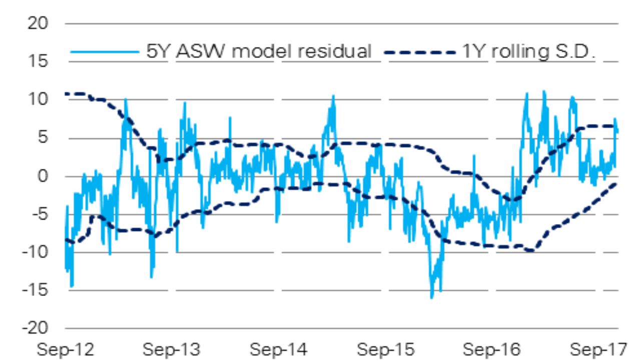
For choice, the term premium in Europe is still high relative to the US or the UK (graph below), but the metrics discussed above indicate a reduced dislocation. Finally, BOBL ASW remains too wide vs. models, which also indicates a richness of the European fixed income space.

Figure 13: Term premium in Europe is still high relative to the US and UK



Source: Deutsche Bank, Bloomberg Finance LP

Figure 14: Bobl ASW remains too wide vs. models



Source: Deutsche Bank, Bloomberg Finance LP

Portfolio Update

We maintain our strategic bearish bias, but adjust the portfolio post the BoE.

In the US, at the time of writing, the market was hovering around our stop level of a weekly close below 2.35%. As it is too close to call as we are going to press, we maintain our short USD10Y for now and will reassess next week. We maintain our other existing USD trades: USD2Y1Y-3Y1Y steepener (higher terminal rate) and USD5s10s steepener vs. 20% short in 2s (higher term premium). As discussed above, the normalization process may be delayed, but the trade is carry neutral.

In Europe, we maintain the short in Germany 5Y (front-end pricing and scope for Bobl ASW to tighten). We maintain the short 5Y France vs. Germany (67%)

and Italy (33%) on the credit fly. We also maintain a cross market EUR 10s30s flatteners boxed against the US (relative long-end term premia).

In the UK, following the BoE meeting, we exit the long May-18 MPC that was entered to hedge the risk of a dovish BoE hike. We maintain the GBP 5s10s steepener vs. 20% short in 2s (higher term premium in the UK and risks of higher fiscal deficits). We also maintain our bearish bias at the long end with the short 30Y Gilt vs. Germany (gilts remain expensive on a cross market basis).

US Strategy

Stuart Sparks
Strategist
(+1) 212 250-0332
stuart.sparks@db.com

Aleksandar Kocic
Strategist
(+1) 212 250-0376
aleksandar.kocic@db.com

Steven Zeng, CFA
Strategist
(+1) 212 250-9373
steven.zeng@db.com

Laura Desplans, PhD
Macro Strategist
(+1) 212 250-7583
laura.desplans@db.com

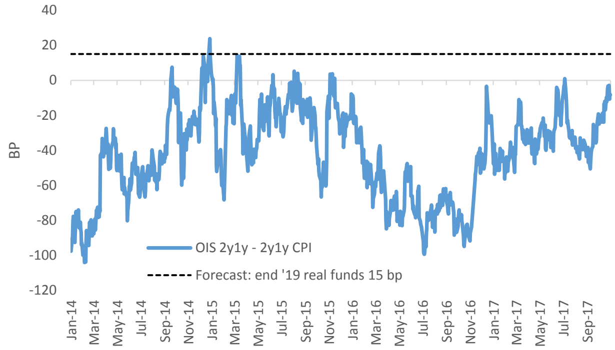
- We remain tactically and strategically bearish, and look for 10y yields to rise to 2.60% by year end, driven primarily by market re-pricing for a higher terminal real short rate.
- We expect Powell's nomination as Fed chair to have little impact on the Fed's short rate trajectory, but see his nomination as positive for the prospects for regulatory reform, particularly with regard to eSLR reform as proposed by the Treasury in June.
- The term premium remains sticky, and has shown little reaction to the release of details of the House Republicans' tax reform bill. We expect a $1.5 trillion increase in the deficit over 10 years to be the "bottom line"; that is, if particular revenue-generating measures prove politically impossible, we expect tax relief to be scaled back such that the plan's impact on the deficit is unchanged.
- The market impact of the tax plan could well be masked by persistent demand by international investors and the pension community. The relative performance of equities and fixed income continues to suggest substantial re-balancing demand from defined benefit pension investors, and recent dollar weakness has likely engendered foreign demand for Treasuries by investors expecting a recovery in the dollar.

Higher deficits versus foreign, pension demand

The NFP payroll report was soft but is unlikely to change the Fed's current narrative due to lingering hurricane distortions. The Fed will in all likelihood simply smooth through the two latest AHE readings to average levels (2.6% y/y) which suggest that the trend is unchanged from late summer. We continue to expect the Fed to raise rates in December, and retain our forecast Fed trajectory which produces an end-2019 short rate of 2.15% that is consistent with 2.60% 10s given an unchanged term premium.

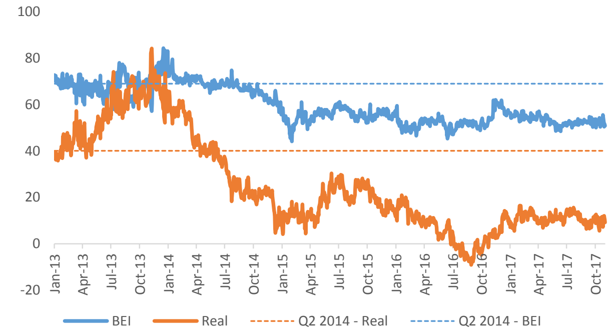
Given recent market attention to the potential nomination of John Taylor as Fed chair, we are not surprised by the "relief" rally that resulted as this uncertainty was resolved by Powell's nomination. We expect little change to the Fed's short rate trajectory as a result of Powell's nomination. Perhaps more importantly for valuations, Powell has communicated rational flexibility on regulation. With Randall Quarles confirmed and the new chair nominated, we remain optimistic that the administration's regulatory agenda – specifically the Treasury's June proposal for eSLR reform – will progress toward implementation.

Figure 15: Real 2y1y OIS rate remains negative, suggesting scope for additional uplift



Source: Deutsche Bank

Figure 16: Real term premium showing little response to release of tax plan

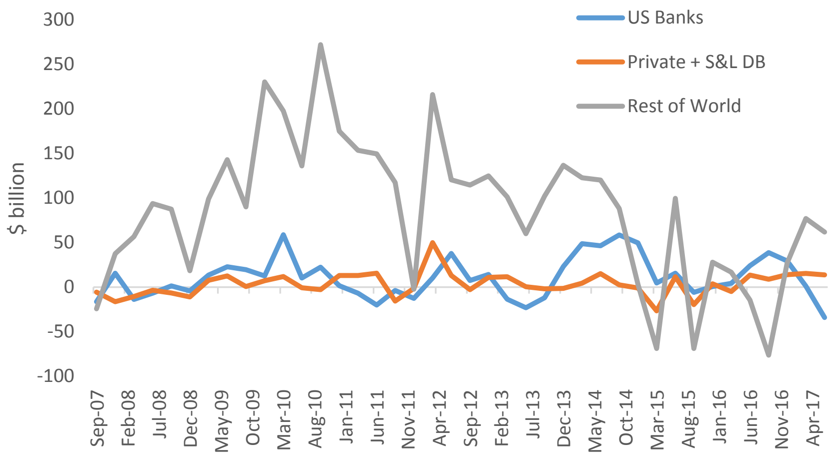


Source: Bloomberg Finance LP, Deutsche Bank

The release of details from the House of Representatives tax reform package was largely shrugged off by the market. As discussed in this week's Bond Market Strategy, the primary political sticking points, unsurprisingly, are the measures to increase revenue. Specifically, the deduction of state and local income and property taxes and the home mortgage interest deduction are potentially problematic, particularly from the perspective of Republicans from high tax states such as New York and California. We would argue that the $1.5 trillion increase to the deficit for the 2018-2027 period is likely the most durable aspect of the plan; that is, if the thornier revenue-raising measures of the plan prove politically impossible, we would expect the tax relief to be scaled down to remain consistent with a $1.5 trillion increase in the deficit. Plan modifications that bring the same degree of tax relief yet with fewer revenue-generating measures would of course imply a greater increase in the deficit, and could prove problematic for the fiscally hawkish right wing of the Republican party.

The muted impact of the tax plan on the term premium is also likely due to persistent demand from international investors and the defined benefit pension community. Recently we argued that the relative performance of the SPX versus the Bloomberg Barclays US Aggregate index was sufficiently great to necessitate the reallocation of $60 billion from pensions' equity holdings to fixed income in order to remain at constant portfolio weights from those implicit in the most recent flow of funds data. Pension demand is not only a major factor in the stickiness of the long end, but also fits nicely within our view of long end swap spreads. Before the Treasury's June regulatory reform proposals, we had argued that even in the absence of regulatory reform, the emergence of a new marginal investor in the long end could partially alleviate balance sheet scarcity by reducing the stock of Treasuries held on the banks' balance sheet. Note, for example, that in the most recent data, banks turned sellers of Treasuries even as foreigners and pensions continued to add Treasury (and corporate) exposure. The new marginal investor has turned out to be the pension community, driven by the need to rebalance portfolio holdings after harvesting windfall equity gains. We think pension flows have been instrumental in widening 30y spreads to our "pre-reform" model value of -23 bp, and expect the next round of flow of funds data to illustrate a continuation of this rotation in demand for Treasuries.

Figure 17: Rest of world, pensions have remained buyers of Treasuries, banks turned sellers



Source: Federal Reserve, Haver Analytics

While the term premium remains considerably depressed, we continue to view significant term premium recovery as next year's order of business. Illustratively, once can capture roughly 60% of the variability in foreign Treasury inflows with the 6m change in the broad dollar, global current account surpluses vis-à-vis the US (as % of US GDP), and levels of the 30y Treasury yield. Within this sort of framework, global current account balances vis-à-vis the US are positively related to foreign inflows, and the 6m change in the broad dollar is negatively related to those flows. That is, as the dollar depreciates, foreign inflows go up. This, parenthetically, is consistent with our (5s10s) curve model, which illustrates that empirically, the change in the broad dollar is positively related to the curve (dollar weakens, 5s10s flattens). These two empirical observations support our view that dollar weakness has drawn foreign inflows from investors countertrading the dollar and using longer maturity Treasuries essentially as a positive carry store of value. We expect foreign inflows to remain strong. Recent values of the global current account variable, 6m change in the broad dollar, and 30y yields imply quarterly foreign inflows of around $60 billion. This suggests that persistent long-end demand will constitute a heavy headwind for term premium re-pricing, even given passage of the tax package.

Inflation-Linked

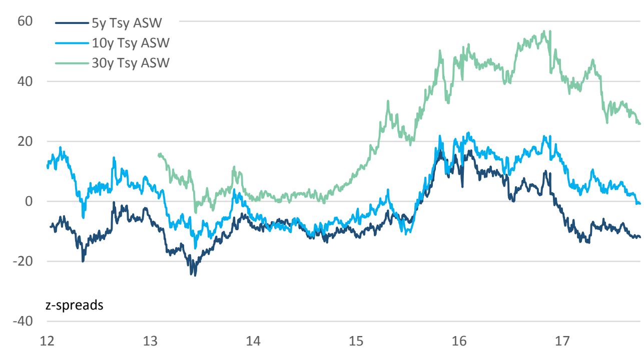
Assessing the impact of the new SLR proposal on TIPS ASWs

Laura Desplans, PhD
Macro Strategist
(+1) 212 250-7583
laura.desplans@db.com

TIPS and nominal Treasury bonds significantly cheapened relative to swaps in 2015, with the spread between ASWs of different maturities remaining considerably wide since then (Figures 18 and 19).[1]

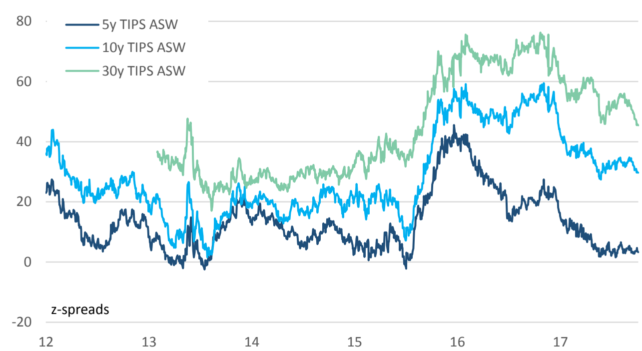
Cheapening was most pronounced at the long end of the curve for both TIPS and nominals. These movements in asset-swap spreads, which started in the second half of 2015, are associated with increased scarcity of balance sheet resulting from bank efforts to converge to Supplementary Leverage Ratio (SLR) compliance. The SLR is a non-risk-weighted measure which requires banks to hold a fixed percentage of capital against both low-risk assets (including US Treasury securities) and high-risk assets, on balance sheet and off balance sheet. We have been arguing for some time (link) that the regulatory reform proposed by the US Treasury department in June should reduce balance sheet scarcity and hence allow Treasuries to richen relative to swaps. Here, we show that TIPS ASWs have displayed a similar pattern as nominal bonds since 2015, but in fact cheapened more during the initial response to the SLR implementation (i.e. TIPS displayed a higher beta).

Figure 18: Since the introduction of the SLR, spreads between Tsy ASWs of different maturities have widened



Source: Bloomberg Finance LP and Deutsche Bank

Figure 19: A similar pattern has emerged in TIPS



Source: Bloomberg Finance LP and Deutsche Bank

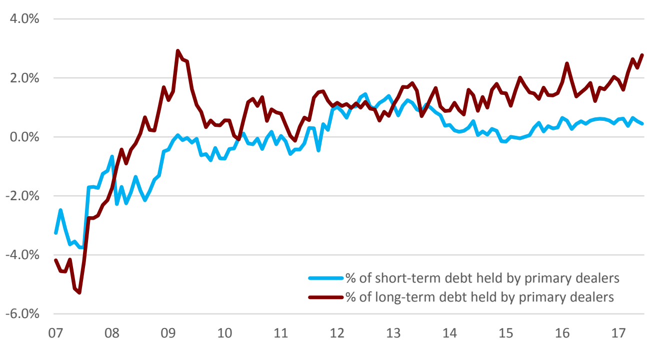
The SLR reform proposes to change the enhanced Supplementary Leverage Ratio (eSLR), which applies to US top-tier bank holding companies and their insured depository institution subsidiaries. The proposal recommends excluding (1) US Treasury securities, (2) cash on deposit with central banks and, (3) initial margin for centrally cleared derivatives from the eSLR calculation. Without the reform, banks must keep a capital requirement of 6% against Treasuries, which effectively means that Treasury holdings have a balance sheet cost of 60bps. Excluding Treasuries from the eSLR ratio would make this balance sheet charge zero. Given the cheapening of nominal Treasury bonds and TIPS relative to swaps after the

1 In this discussion, we focus on asset swap spreads relative to LIBOR, so that an increase in the ASW represents cheaper nominal Treasuries and TIPS.

introduction of this balance sheet charge, we expect them to richen significantly after the reforms are implemented.

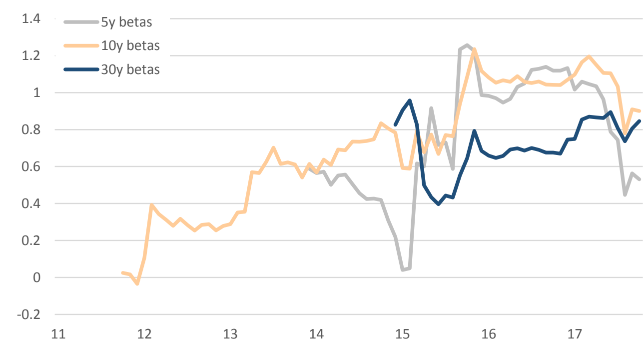
Figures 18 and 19 also show that while the 5y ASW has gone back to its pre-2015 level, Treasuries of longer maturities remain relatively cheap relative to swaps. This has noticeably increased the spread between ASWs of different maturities. For example, the spread between 5y and 10y TIPS ASWs is now more than twice its pre-2015 average. We believe this is likely to be due to banks being a larger player in the long-term Treasury market. Primary dealers, for example, hold a higher proportion of long-term Treasury securities (Figure 20). Hence, we expect the removal of the balance sheet cost to have a larger impact on long-term bonds: we anticipate the reform to richen long-term Treasuries more than short-term Treasuries.

Figure 20: Primary dealers hold a higher proportion of long-term Treasury bonds



Source: : Bloomberg Finance LP and Deutsche Bank

Figure 21: TIPS cheapened more than nominals during late 2015 (rolling beta of changes in TIPS ASW on changes in nominal ASW)

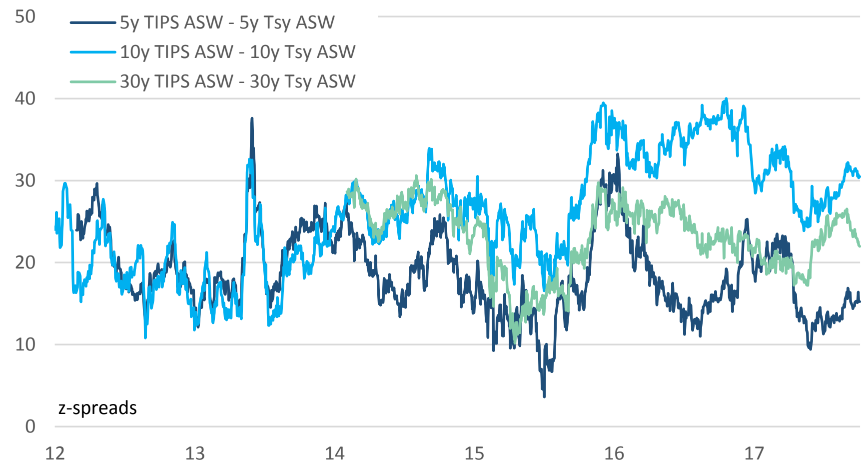


Source: Bloomberg Finance LP and Deutsche Bank

Looking into how changes in TIPS ASWs relate to changes in Treasury ASWs, we find that, using a rolling regression of 20 months for a given maturity, a change in the latter is usually associated with a smaller change in the former (Figure 21). However, this is not the case for the rolling windows which include the second half of 2015. During this period, in which US banks began the process of SLR compliance, betas are generally larger than one. We think the TIPS liquidity premium exacerbated the effects of the introduction of the SLR, leading to a more pronounced cheapening in TIPS than in nominals. Later in the sample period, and when the year 2015 is taken out of the regression, betas fall back below one again. When analyzing the second half of 2015 alone, the period in which most of the cheapening associated with the SLR happened, the betas are 0.8, 1.2 and 0.9 for 5y, 10y and 30y ASWs respectively.

Our swap model predicts the reform will decrease the 10y Treasury ASW by about 10bps, and the 30y Treasury ASW by 10 to 15bps. Using the beta estimated using data for the second half of 2015, this gives a decrease in the 10y TIPS ASW of 12 bps, and a decrease in the 30y TIPS ASW of 9 to 13bps. We don't expect 5y ASWs to move significantly from current levels given that, as we mentioned above, we anticipate the reform to affect them less. Finally, given that the beta for 10y ASWs is higher than one, the 10y asset-swap differential (i.e. the difference between the 10y TIPS ASW and the 10y Tsy ASW) should decrease and become closer to the 5y asset-swap differential (Figure 22). This should bring the distance between 10y and 5y asset-swap differentials back to its pre-2015 level.

Figure 22: SLR reform should allow 10y TIPS to richen more than nominal on asset-swap spreads



Source: Bloomberg Finance LP and Deutsche Bank

We recommend:

Buy 10y TIPS asset swap at LIBOR + 34 bps.

- TIPS and nominals should both richen relative to swaps given passage of the Treasury's proposal to allow SLR deductions.
- Longer maturities should richen more than shorter maturities.
- We expect TIPS to richen more than nominal Treasuries. Intuitively, because TIPS cheapened more than nominals during late 2015 due to a more acute balance sheet pressure, the removal of the latter is likely to result in the opposite effect, at least in the short term. In other words, we expect TIPS ASWs to trade with a beta greater than 1.0 relative to nominal ASWs, meaning that buying TIPS ASWs is a "high beta" position for regulatory-driven Treasury outperformance.

The primary risk to the trade is that TIPS cheapen relative to swaps, and the maximum loss is in theory unlimited.

UK Strategy - Tangled tightening

Jack Di-Lizia
Strategist
+44-20-754-51865
jack.di-lizia@db.com

- The BoE's hike came with dovishness attached. Of particular focus was the decision to remove the previous yield curve guidance – endorsing a historically dovish tightening cycle of only two further hikes into 2020
- This may drive expectations that front end pricing is capped at 1%. In the short term this may be valid and help steepen the curve, but it is dangerous to jump too quickly to such a conclusion
- First, Carney referenced a reassessment of the policy outlook should the outcome of Brexit negotiations shift. Sign of a transitional deal before year end could therefore generate more hawkish pricing
- Even in the case of hard Brexit, however, the impact on monetary policy is unclear. While the growth hit is unambiguously negative, the negative supply shock and inflation pass through from weaker FX could maintain hawkish pressure on the BoE
- The monetary policy response in the various Brexit scenarios is therefore not straightforward, reflected in the fact that the BoE hiked rates while keeping relatively dovish messaging. Fiscal, therefore, continues to represent the first response to Brexit headwinds from here
- Following the dovish reaction to the November meeting, we exit the rec. May18 Sonia that we had added two weeks ago as a hedge. With the GBP term premium depressed, we maintain GBP 5s10s steepeners vs 20% 2s, with an alternative carry positive expression of paying GBP 5s10s15s. On a cross market basis we stay short 30Y UK vs Germany and in RV are long 2Y ASW vs the 7Y point

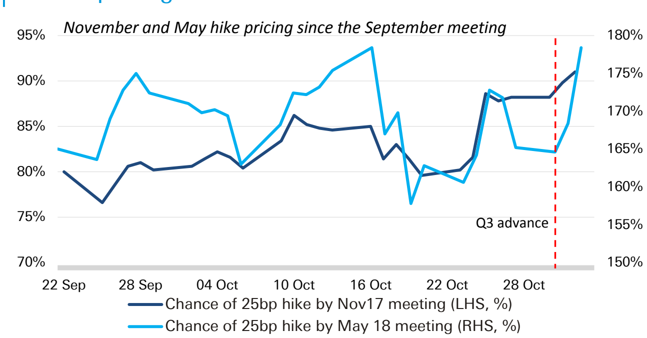
Tangled tightening

The BoE's first rate hike in over 10 years came with dovishness attached. Of key focus to the market was the MPC's decision to remove their previous forward guidance on the yield curve – that the market was underpricing the potential for future rate hikes –endorsing a historically dovish tightening cycle of two further hikes into 2020.

Furthermore, while the MPC's projections were little changed from August, the Minutes and subsequent press conference suggested increased concern over the demand side in particular, especially given the potential impact on Brexit. In contrast, there is growing belief from the BoE that supply side constraints are now becoming binding.

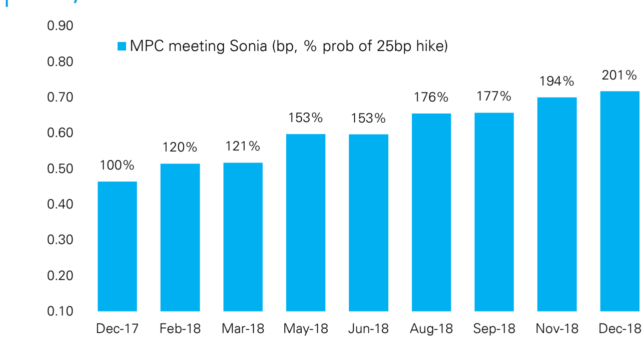
Together, this points to a decision to hike driven primarily by growing concern over supply constraints, despite the potential for weakened demand.

Figure 23: Following the stronger Q3 GDP release, market pricing consolidated around a November hike



Source: Deutsche Bank, Bloomberg Finance LP

Figure 24: A second hike is now priced by the end of next year

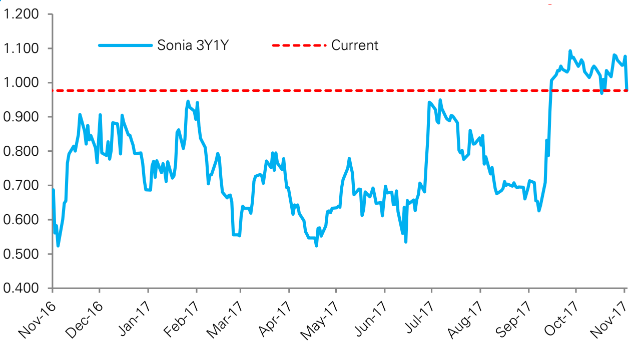


Source: Deutsche Bank, Bloomberg Finance LP

However, while MPC's decision to remove the previously hawkish forward guidance may drive expectations that GBP front end pricing is now ultimately capped at two more hikes, and so a terminal rate of 1%. This is in line with current terminal rate pricing, with 3Y1Y sonia pointing to Bank Rate at 1%.

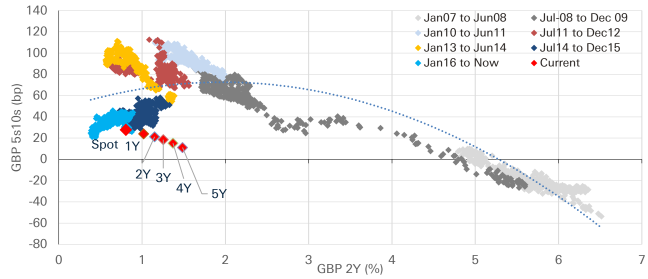
Even assuming an r* of 0%, this would point to the BoE significantly below neutral, however. Moreover, this low terminal rate pricing is the pivot around which the curve has been bear flattening. With the BoE's decision likely to anchor short end rates in the near term at least, this should allow a re-steepening of the UK curve should rates move higher, in contrast to recent bear flattening episodes as the BoE was priced more hawkishly.

Figure 25: The market is pricing terminal Bank Rate at ~1%



Source: Deutsche Bank, Bloomberg Finance LP

Figure 26: The low terminal rate priced relative to history has led to bear flattening at a much lower level of yields



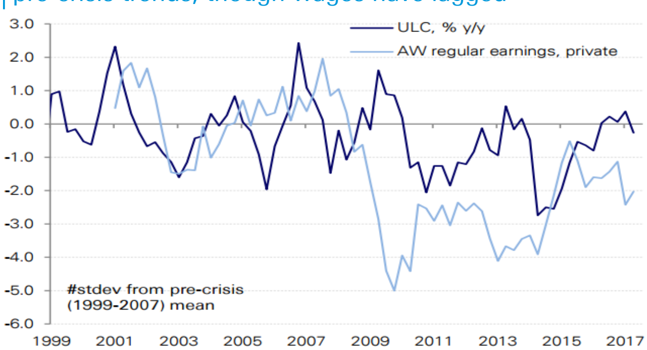
Source: Deutsche Bank, Bloomberg Finance LP

In the short term at least, market pricing may remain capped at only two more hikes, which may encourage positive carry trades at the front end. However, it is dangerous to jump too quickly to such a conclusion.

First, Carney explicitly referenced the potential for the MPC to reassess policy should the outcome of Brexit negotiations change. With the UK government's bargaining position remaining limited in the ongoing negotiations, and recent signs of compromise suggesting a willingness to reach a transitional deal quickly, a clear signal of transition by new year (likely in line with the EU's terms) remains more likely than not.

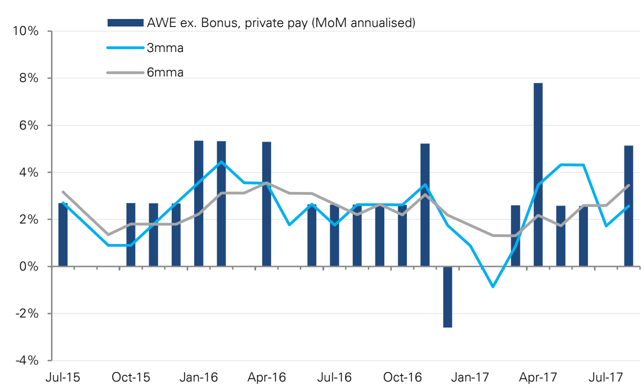
This would help to offset some of the Brexit drag impacting the BoE's demand outlook, and allow a more material repricing given signs of more limited spare capacity than is currently being priced.

Figure 27: Unit Labour Costs are now back in line with pre-crisis trends, though wages have lagged



Source: Deutsche Bank, Haver Analytics

Figure 28: Regular private pay growth averages are now above 2.5% annualised



Source: Deutsche Bank, Haver Analytics

However, even in the case that no transitional deal is announced and a harder Brexit becomes more likely, the ultimate impact on BoE policy is not towards easing. A hard Brexit would represent both a negative shock to demand and a negative shock to supply, at the same time as the UK continues to run a current account deficit.

Thus, while the impact of a harder Brexit on growth is unambiguously negative, the impact on inflation is less clear given the negative impact on supply.

The nexus between the path of Brexit, UK growth, the currency, and inflation is therefore less clear. On the one hand a transition deal should strengthen sterling and in turn put downwards pressure on inflation, but at the same time it should improve the demand side prospects for the economy. On the other, the hard Brexit impact on growth will be accompanied by further FX driven inflation, which makes the BoE's policy response in terms of whether to tighten or ease in this scenario less than clear.

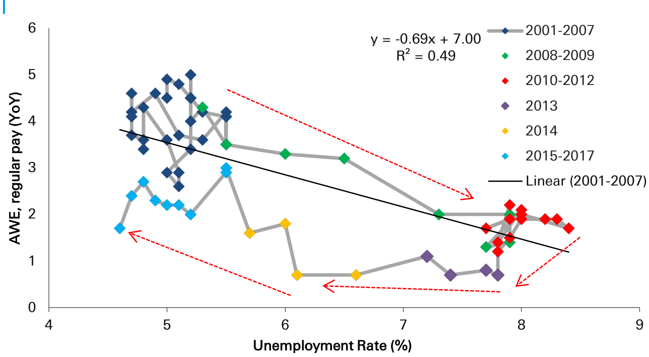
In sum, the monetary policy response to the various Brexit scenarios is not straightforward, which is reflected by the fact that the while the MPC raised rates for the first time in 10 years, their message remains tangled.

A more conventional supply side tradeoff

On the supply side however there growing evidence that the MPC is facing a more conventional trade-off. This can be seen in particular in the labour market, where wage growth over recent months has begun to pick up (Fig 28) and the annualized regular private sector pay is now above 3.5% 6mma. What's more, a continued decline in labour market slack in the UK should ultimately push wages higher.

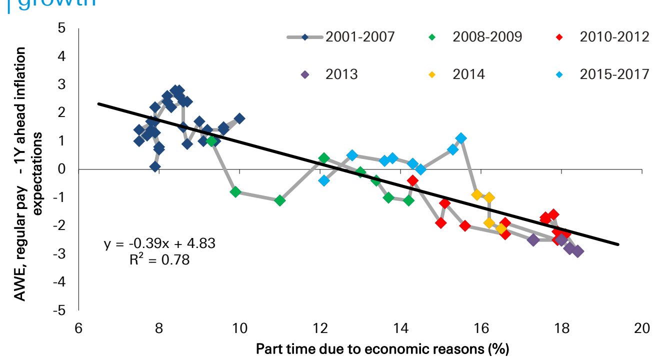
While the traditional Phillips curve in the UK has flattened significantly since the crisis (see chart below), broader measures of slack now point to upwards pressure on wages. Our preferred measure is the share of part time employed due to economic reasons, which captures similar slack dynamics to the unemployment rate but which will also be influenced by broader labour market dynamics including productivity and shifts in the nature of work. Adjusting as well for inflation expectations, we find the UK labour market to wage relationship remains strong.

Figure 29: The basic relationship between labour market slack and growth appears to have shifted



Source: Deutsche Bank, Haver Analytics

Figure 30: Alternative measures suggest reducing labour market slack should put upwards pressure on wage growth



Source: Deutsche Bank, Haver Analytics

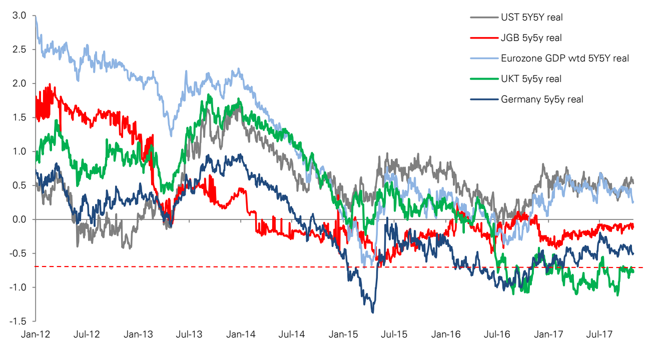
Monetary policy unclear, focus on the fiscal

While the monetary policy response to Brexit may remain unclear, fiscal policy should represent the first response to Brexit headwinds from here. Moreover, in a hard Brexit scenario, that could be seen to interrupt the MPC's hiking cycle, the political, and in turn fiscal, impact is non-linear.

As we have argued previously, there is no parliamentary majority for hard Brexit, increasing the likelihood of a political crisis should the negotiations point clearly in that direction. In this scenario, a vote of confidence followed by a fresh election would be a key possibility, which could in turn lead to a Labour led government and sharply loosen fiscal policy.

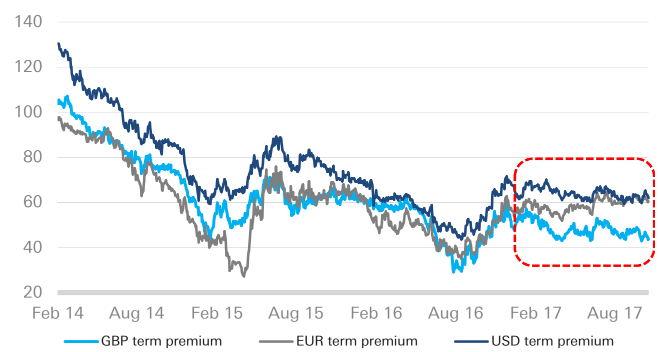
Nevertheless, there remains very limited evidence that the market is pricing any pivot towards fiscal policy. On a cross market basis medium term real rates remain in deeply negative territory, and even after accounting for the CPI/RPI wedge, trade 30bp below Germany. The GBP term premium is also flat to models and depressed on a cross market basis, despite the constraints to the BoE re-launching Gilt based QE and the growing likelihood of fiscal loosening (charts below).

Figure 31: UK 5Y5Y real yields remain extremely rich



Source: Deutsche Bank, Bloomberg Finance LP

Figure 32: The GBP term premium (5s10s vs. 20% 2s) is depressed relative to the US and EUR



Source: Deutsche Bank, Bloomberg Finance LP

Trade Recommendations

We had previously recommended receiving May18 MPC sonia as a hedge to a more dovish message at the November meeting. Following the post BoE rally the risk reward is no longer attractive, and as argued above the interaction between harder Brexit and monetary policy remains unclear. We therefore exit the trade.

Further out the curve, we continue to find the UK term premium excessively flat and therefore maintain the GBP 5s10s vs. 20% 2s steepener. As we highlighted last week, an alternative, positive carry expression of the trade is to pay the belly of the GBP 5s10s15s fly.

On a cross market basis, GBP valuation remains extremely rich and we therefore maintain the short 30Y UK vs. Germany. In RV, we also stay long 2Y ASW boxed against 7Y.

Japan Strategy

BOJ to persist with YCC and equity ETF purchases as "passive" approach

Makoto Yamashita, CMA
Strategist
+81-3-5156-6622
makoto.yamashita@db.com

- The BOJ hiked its GDP growth forecast for FY2017 in its October Outlook for Economic Activity and Prices report while lowering its CPI inflation forecasts for FY2017 and FY2018, suggesting that the central bank continues to lack confidence in both current price trends and the near- to medium-term outlook.
- The BOJ's "yield curve control" (YCC) framework appears highly sustainable and should enable domestic interest rates to be kept low and stable—via an increase in the central bank's JGB ownership share as well as fixed-rate operations if needed—even when overseas interest rates are rising. Our impression is that the BOJ has opted for a "passive" approach of waiting for the yen to weaken as a consequence of widening foreign-domestic interest rate differentials. However, there are still quite understandable concerns regarding the BOJ's ability to respond to an economic slowdown or other "risk off" factors. We therefore continue to recommend that Japanese bond investors buy US and European bonds on price dips by way of a hedge against the risk of JGB yields moving even lower.
- The BOJ's equity ETF purchases were quite limited in October, but will not necessarily increase in the final two months of this year as they did in December 2016. We say this because the BOJ has until now only bought ETFs after seeing the TOPIX stock price index end the morning session below the previous day's close. We expect ETF-buying operations to continue at a pace of around JPY5.7 trillion/year in the longer term and thereby help to limit any falls in stock prices. Any further rally in equities is liable to reduce demand for super-long JGBs by boosting the portfolio values of banks and traditional life insurers, for which reason we advocate a range-trading approach to the super-long sector.

BOJ has upped its economic growth forecasts while further lowering its inflation projections

As expected, the BOJ opted to leave monetary policy on hold at its October 31 meeting. The latest Outlook for Economic Activity and Prices report saw the BOJ hike its GDP growth forecast for FY2017 by 0.1%pt while yet again lowering its CPI inflation forecast for FY2017 and also downwardly revising its FY2018 inflation projection.

The October report said that "upside and downside risks to economic activity are generally balanced, and risks to prices are skewed to the downside". This compared with "risks to both economic activity and prices are skewed to the downside" in the July report. On the price front, the central bank pointed out that "there are items for which prices are not particularly responsive to the output gap", and also expanded upon its July explanation in saying that "with regard to goods and services that are difficult to differentiate, their prices may also constrain the acceleration of CPI inflation if competition among firms intensifies further, due mainly to changes in the distribution system and deregulation". The overall picture is one of the BOJ continuing to lack confidence in both current price trends and the near- to medium-term outlook.

Figure 33: BOJ economic growth and inflation forecasts

	GDP growth (%)				Core CPI inflation (%)			
	2016	2017	2018	2019	2016	2017	2018	2019
2016/7/29	1.0	1.3	0.9		0.1	1.7	1.9	
2016/11/1	1.0	1.3	0.9		-0.1	1.5	1.7	
2017/1/31	1.4	1.5	1.1		-0.2	1.5	1.7	
2017/4/27	1.4	1.6	1.3	0.7	-0.3	1.4	1.7	1.9
2017/7/20		1.8	1.4	0.7		1.1	1.5	1.8
2017/10/31		1.9	1.4	0.7		0.8	1.4	1.8

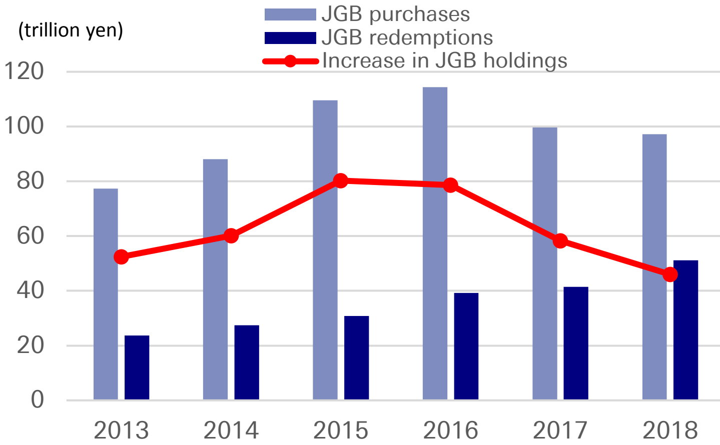
Note:FY2019 inflation forecasts exclude the envisaged impact of the consumption tax hike scheduled for October 2019
Source: Bank of Japan, Deutsche Securities

The BOJ has thus stuck with its commitment to increase its JGB holdings by "about 80 trillion yen" per year and its total ETF purchases by "about 6 trillion yen" per year, signaling that it intends to keep monetary conditions highly accommodative as the prospect of +2% inflation continues to look remote at best.

BOJ's "yield curve control" framework appears sustainable

That said, the BOJ will in reality only grow its JGB holdings by around JPY60 trillion in 2017, while net growth looks set to slow to JPY46 trillion in 2018 even at the current pace of buying due to an increase in redemptions of BOJ-held bonds. It is also possible that the BOJ will opt to reduce its gross purchases if the MOF does end up deciding to cut its market issuance of JGBs for FY2018.

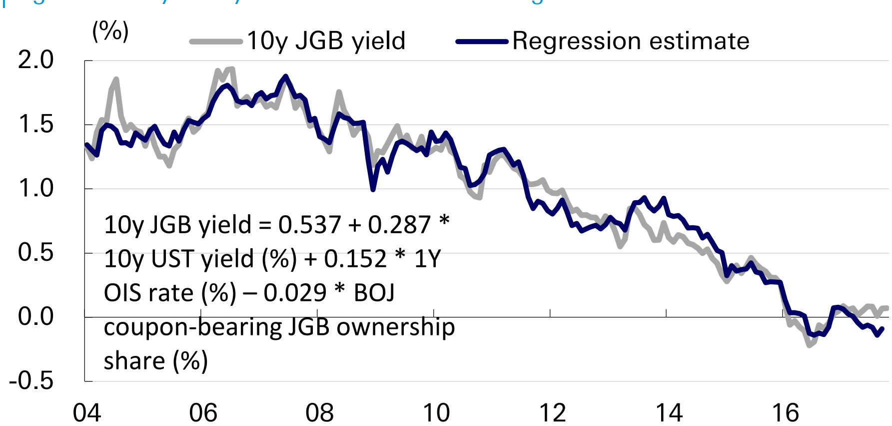
Figure 34: BOJ JGB purchases, BOJ-owned JGB redemptions, and increase in BOJ JGB holdings



Note:Figures for 2017 and 2018 are Deutsche Securities forecasts
Source: Bank of Japan, Deutsche Securities

Maintaining the YCC framework should be possible even if net JGB purchases are reduced, however. Our regression model for the 10y JGB yield uses the 10y UST yield and the BOJ's JGB ownership share as explanatory variables. We are forecasting that the 10y UST yield will rise to around 2.60% by end-2017 and 3.00% by end-2018, and our regression coefficient implies that an increase of roughly 60bp from current levels will boost the 10y JGB yield by somewhere in the order of 17bp. However, this is set to be largely offset by the roughly –15bp impact of the BOJ's JGB ownership share increasing by around 5%pt. Moreover, the BOJ has the ability to conduct fixed-rate operations in response to a rise in market interest rates. The jury is still out as to whether reducing purchase amounts will be effective in curbing downward pressure on JGB yields, but the YCC framework should at least be capable of limiting yield upside.

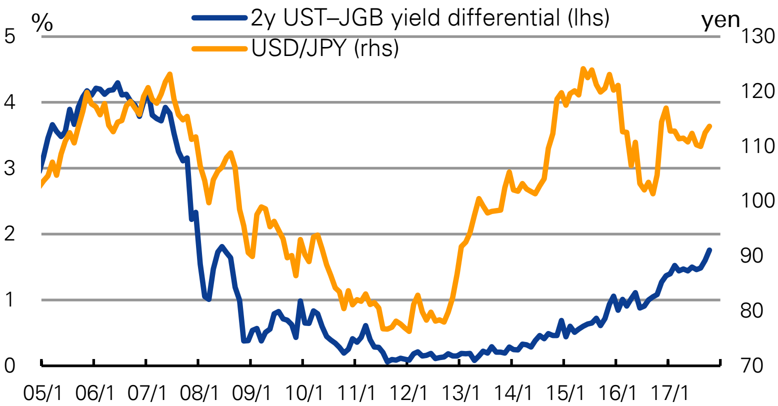
Figure 35: 10y JGB yield: actual level versus regression estimate



*Note:BOJ JGB ownership share = three-month average with a one-month lead; estimation based on monthly data for 2004~; R*2=0.96*
Source: Bank of Japan, Deutsche Securities

We see no obvious reason why the YCC framework cannot remain in place even beyond the (April 2018) end of BOJ Governor Haruhiko Kuroda's current term. Our impression is that the BOJ has opted for a "passive" approach of waiting for the yen to weaken as a consequence of widening foreign-domestic interest rate differentials, which might indeed be considered reasonable given that the USD/JPY exchange rate has historically exhibited relatively strong correlation with the 2y UST–JGB yield differential (a reflection of differing expectations for monetary policy).

Figure 36: 2y UST–JGB yield differential versus USD/JPY



Source: Bloomberg Finance LP, Deutsche Securities

The problem, however, is that the BOJ may struggle to "exit" its current monetary policy regime even if the global economy performs strongly and other central banks persist with their "normalization" efforts. Our economists expect Japanese core CPI inflation to run at around +0.5% to +0.7% through FY2020. An "ideal" cycle would see the BOJ respond to an inflation slowdown in the face of yen appreciation by easing monetary policy, thereby driving down the yen sufficiently to catalyze faster inflation, at which point the BOJ would start tightening monetary policy in order to reverse yen depreciation. But the BOJ's +2% inflation target still appears so ambitious as to be in "pipe dream" territory. If the inflation rate would be stable above 1% level, BOJ might consider the hike of 10Y JGB yield target . However, we can not expect stable 1% inflation in Japan.

BOJ YCC can indeed provide quite effective monetary accommodation by keeping domestic interest rates lower than appears commensurate with (strong) overseas economic performance.

That said, a strategy of keeping the 10y JGB yield pegged at "around zero" even as overseas interest rates move higher can hardly be considered "proactive". It is difficult to envisage the BOJ shifting into tightening mode if inflation fails to quicken appreciably beyond +0.7% (still well below the +2% target level), but it also appears as though the BOJ might struggle to respond to an appreciation of the yen driven by a loss of global economic momentum. In casting a dissenting vote against maintaining the status quo at the October 30–31 meeting, recently appointed BOJ policy board member Goshi Kataoka proposed an enhancement of YCC whereby the central bank would promise "to purchase JGBs so that 15-year JGB yields would remain at less than 0.2 percent". Many market participants are also likely to feel that reflationist policy measures have reached their ultimate limits. We therefore continue to recommend that Japanese bond investors buy US and European bonds on price dips by way of a hedge against the risk of JGB yields moving even lower, believing that the BOJ might very well find itself running out of effective options if faced with renewed downward pressure on economic activity and prices.

Figure 37: Interest rate forecasts

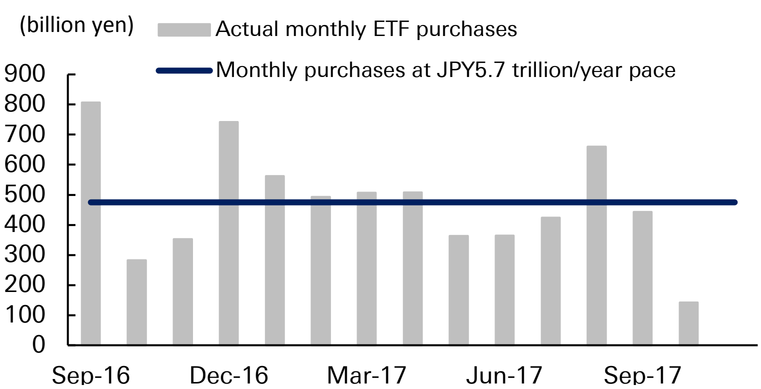
	Current	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1
Tier 3 policy rate	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
10y JGB yield	0.06	-0.04 ~ +0.15	-0.04 ~ +0.17	-0.04 ~ +0.15	-0.04 ~ +0.15	-0.04 ~ +0.15	-0.04 ~ +0.15
20y JGB yield	0.59	+0.45 ~ +0.75	+0.45 ~ +0.85	+0.45 ~ +0.75	+0.45 ~ +0.75	+0.45 ~ +0.75	+0.45 ~ +0.75
30y JGB yield	0.85	+0.75 ~ +1.00	+0.75 ~ +1.10	+0.75 ~ +1.00	+0.75 ~ +1.00	+0.75 ~ +1.00	+0.75 ~ +1.00

Source: Deutsche Bank Group forecasts

BOJ has ample room to increase its equity ETF purchases if stock prices start to face downward pressure

Kuroda fielded questions about the BOJ's low level of equity ETF purchases for last month at his October 31 press conference, responding "Our pledge on the pace of ETF buying is different in nature from that for government bond purchases. Our bond purchases are aimed at achieving an appropriate shape of yield curve. As for ETF purchases, our pledge to buy at an annual pace of 6 trillion yen is our policy guidance in itself" and "The amount of our ETF purchases vary from time to time ... We don't have a strict deadline for achieving our loose target of buying them at 6 trillion yen per year" (Reuters). Kuroda's comments and past experience suggest that (1) the BOJ is indeed explicating targeting JPY5.7 trillion per year in equity ETF purchases (excluding those bought in line with Special Rules for Purchases of ETFs to Support Firms Proactively Investing in Physical and Human Capital), (2) this target will not necessarily need to be achieved over any specific 12-month period, and (3) the BOJ follows certain "rules" when buying ETFs. (2) and (3) have indeed resulted in some quite significant divergences from the targeted average monthly pace of JPY475 billion since the August 2016 decision to roughly double the BOJ's ETF purchases.

Figure 38: BOJ equity ETF purchases (monthly)

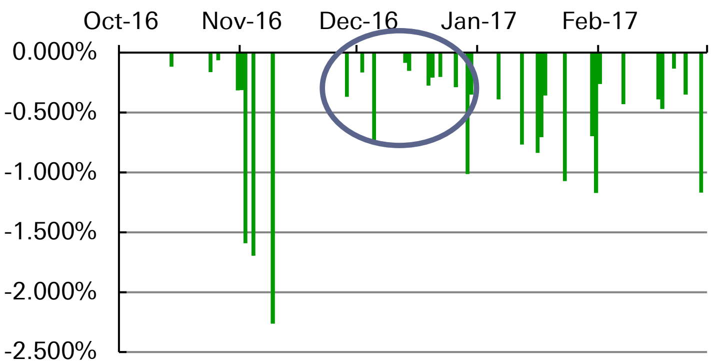


Source: Bank of Japan, Deutsche Securities

The BOJ would have had few opportunities to buy in October as the Nikkei 225 went on an unprecedented 16-day winning streak. Since August 2016 we have yet to see a single instance of the BOJ buying ETFs on days when the TOPIX index ended the morning session above the previous day's closing level. We expect the central bank to persist with this approach for at least the time being. Some market participants appear to have viewed the December 2016 increase in ETF purchases as having been necessitated by a decline in October 2016 (assuming that the BOJ was looking to meet some target for calendar-year purchases), but it is important to recognize that the TOPIX index actually fell during the morning session of each day during December 2016 when the BOJ was a buyer. As such, we consider it unlikely that the BOJ will go out of its way to buy ETFs during the final two months of 2017. The flipside is however that the BOJ now has ample room to buy ETFs if stock prices should start falling, which should help to ensure that any correction remains reasonably shallow.

Any further rally in equities is liable to reduce demand for super-long JGBs by boosting the portfolio values of banks and traditional life insurers, for which reason we advocate a range-trading approach to the super-long sector.

Figure 39: BOJ ETF purchase dates around December 2016: [morning close - previous day's close] ÷ previous day's close {i.e. percentage fall during morning session}



Source: Bank of Japan, Deutsche Securities

Dollar Bloc Strategy

This article was previously published on 2 November.

Ken Crompton
Strategist
(+61) 2 8258-1361
kenneth.crompton@db.com

Dollar Bloc Research Archive

- **The RBNZ and RBA both meet next week and will also both release their quarterly forecast updates. We aren't expecting any change in policy rates from either Bank but the evolution of the RBNZ's forecasts in particular will be worth watching given the above-market CPI and labour force data for Q3.**
- **The labour force survey in NZ has proven a counterpoint to political uncertainty of recent weeks, most of which has been bullish for rates markets (and bearish for the currency). Our NZ economist now expects the RBNZ to tighten twice in 2018, beginning in August. Market pricing falls well short of this scenario so we think there is some outright cheapness in the NZ front end, but it is relative pricing to Australia that remains even more compelling - there is still slightly more tightening priced for the RBA over the next year than the RBNZ.**

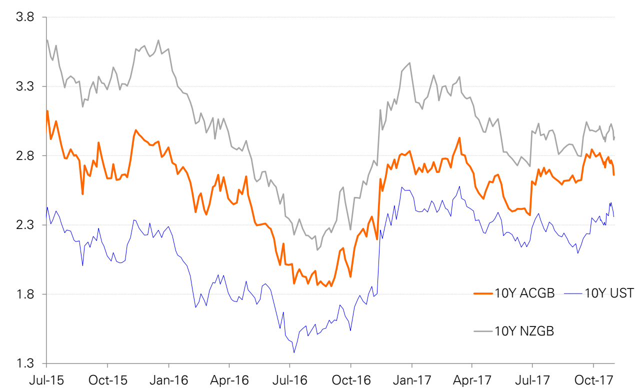
The meetings of the FOMC, ECB and BoJ over the past week will be followed by the BoE on 2 November and then the RBA (7 Nov) and the RBNZ (9 Nov) next week. Both local Banks are publishing their quarterly forecast updates (the RBNZ MPS on 9 November, and the RBA SMP on 10 November). And this comes on top of a bevy of other first-tier data released over the past week.

In New Zealand, the appointment of a Government has brought the period of post-election uncertainty to an end, but this has seen attention transition to key areas of policy differentiation under the new government. For monetary policy, discussion in the press this week included a proposal to broaden the RBNZ's policy setting framework to a committee which includes outside members. Communication could also be increased, with meeting minutes being added to the current formal OCR review statements and quarterly MPS release. At the level of detail known thus far, this model for both decision making and communication would be broadly similar to the way that the RBA or BoE monetary policy framework operates.

Some interruption to the cycle of political uncertainty in New Zealand was found this week in the hard data of the third quarter labour force survey. The details - particulary around wages growth - tempered the overall reception of the release a little but at a headline level the much stronger than expected employment growth, a fall in the unemployment rate to 4.6% and solid wages growth presented some strong counterpoints to the increasingly subdued picture painted by markets over the past few months.

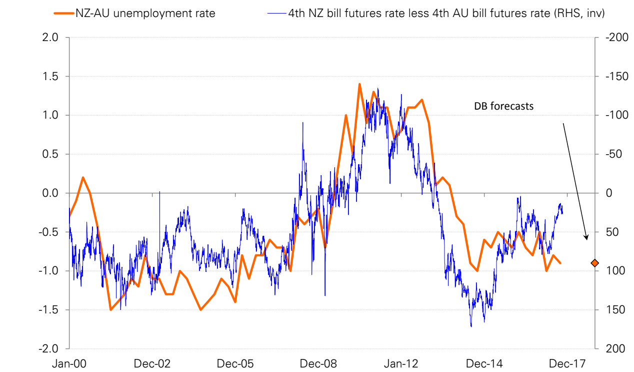
Thus whilst it remains unlikely that we will get a decidedly hawkish MPS from the RBNZ on 10 November, the strong CPI combined with this labour force report does mean that projections will need to shift a little upward from the August MPS. In combination this continues to support our recommendation toward being short NZD rates vs AUD rates, even as we now expect the RBNZ to tighten twice next year.

Figure 40: 10Y yields



Source: Deutsche Bank, Reuters

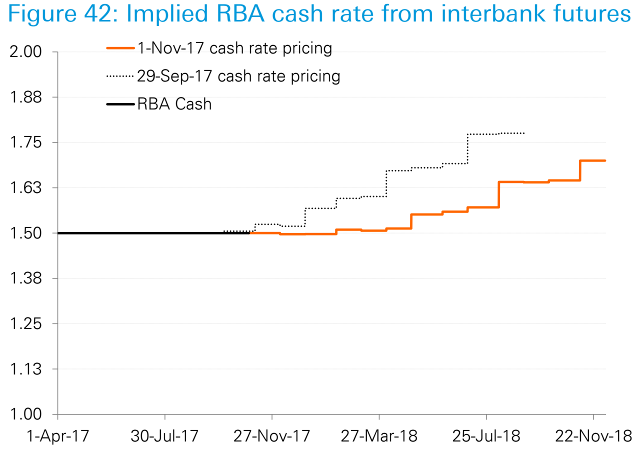
Figure 41: Falling NZ unemployment highlights rates richness to Australia



Source: Deutsche Bank, Bloomberg Finance LP

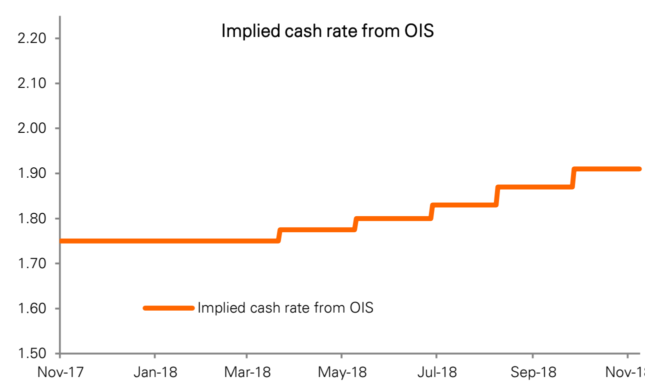
Neither the RBA or the RBNZ have meaningful change of a cash rate changed priced for the meetings next week. Over the next year the RBNZ has about 16bp of tightening priced, a little less than in Australia, and it is this relativity that continues to support our bias towards short NZD vs AUD rates. Australian front end pricing has seen a fairly large moderation in the past few weeks though - at the end of September there was more than 25bp of tightening priced over twelve months.

Figure 42: Implied RBA cash rate from interbank futures



Source: Deutsche Bank, Reuters

Figure 43: Implied RBNZ cash rate from OIS



Source: Deutsche Bank, Bloomberg Finance LP

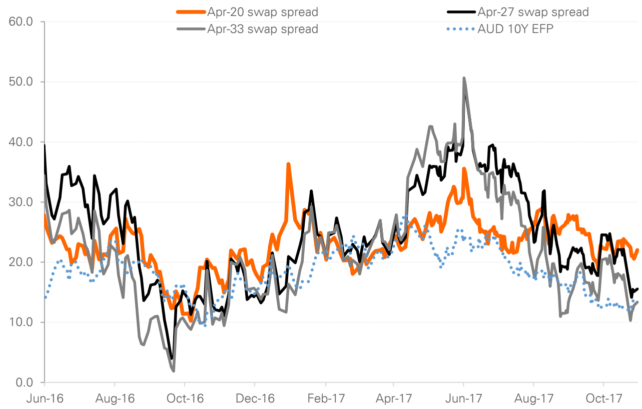
New NZGB 2029 - updated fair value preview

This article was previously published on 31 October.

In mid-September we published early thoughts on fair value of the NZGB 2029 bond that is due to be issued before the end of 2017.

With the new Prime Minister having now assumed office, the period of governmental uncertainty that followed the election has been resolved. Thus the major impediment to launching the new bond has been removed, although with liquidity in bond markets typically on the ebb from mid-December onwards we think the next six weeks or so are the most likely issuance window for the new 20 April 2029 bond.

Figure 44: NZD swap spreads with AU 10Y EFP



Source: Deutsche Bank, Reuters

Figure 45: DB estimate of fair value for 3.0% Apr-29 NZGB (tight end of range)

NZGOV 3.00% 20-Apr-29

Yield	3.1100%
Z-spread	-14.4
S/Q ASW	-14.9
Mod Durn	9.61
DV01	952.31
Price	$98.95

Spread to

NZGOV Apr-27	18.5
NZGOV Apr-33	-17.4

10Y UST	74.2
10Y Gilt	177.5

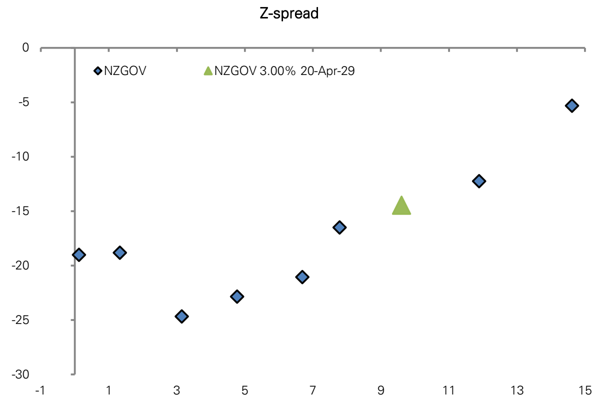
Source: Deutsche Bank, Reuters, Bloomberg Finance LP

Although the change of government is likely to eventually bring about some changes to fiscal policy and thus the NZDMO's issuance plans, we think that is unlikely to occur outside of the regular budget cycle and thus the current funding program will hold until the next fiscal year. After the Pre-election Economic and Fiscal Update during August the NZDMO confirmed that the nominal bond program for 2017-18 was $6.0bn, and based on that we continue to expect an initial issue of the Apr-29 to take the form of a $2bn syndication. This would sit well alongside the $350mn per month of nominal bond issuance either conducted or planned in most months in the fiscal year thus far.

Long end NZGBs have underperformed swap over the past few months - although the starting point for that cheapening was swap spreads on the 2027 NZGB at upwards of 50bp, and even at the current levels of around 15bp spreads on that bond aren't as tight as they were in September 2016. Nevertheless the narrowing in spreads has been a little more than that seen in shorter duration bonds (such as, in the chart below, the 2020) so it is possible to see this as some level of concession to supply in the NZGB curve. Political uncertainty could be a factor here too, although swap spreads are only around 3bp narrower now than prior to the election. Australian 10Y swap spreads have narrowed over that same period, albeit at a much lower beta.

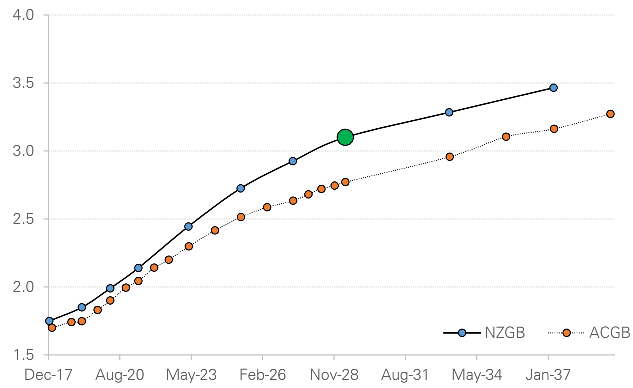
The new 20 April 2029 (for which we will assume a 3.0% coupon) fills a gap between the Apr-27 and Apr-33 NZGBs. Our various methods of yield curve interpolation - including fitted zero curves, or interpolation of the z-spread curve - give us a relatively tight band for fair value at a yield of 3.11-3.13%, which is a spread of 18.5-20.5bp over the NZGB Apr-27. Concession for a new issue premium could put this 1-3bp higher, but with the NZGB curve relatively steep and yields toward the upper end of the year's trading range the new issue premium will likely be small, in our view.

Figure 46: NZGB modified duration vs Z-spread



Source: Deutsche Bank, Reuters

Figure 47: NZGB and ACGB yield curves



Source: Deutsche Bank, Reuters

At our estimated level of fair value the NZGB Apr-29 would price about 33bp over the Apr-29 ACGB, 74bp over the current benchmark 10Y Treasury and 178bp over Gilts.

Covered Bonds, Agencies and Supras

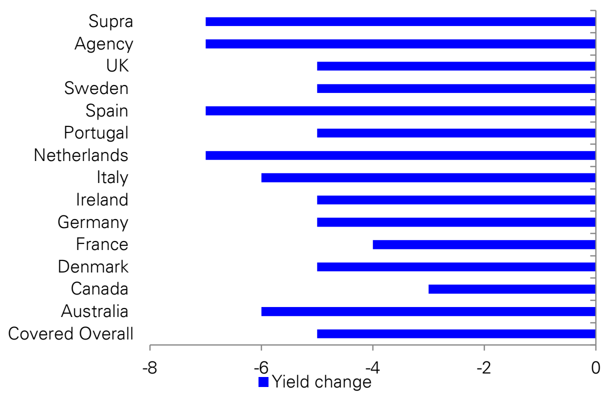
Bernd Volk
Strategist
+41-44-227-3710
bernd.volk@db.com

- Last week's ECB announcements led to lower yields and tighter spreads with higher yielding covered bonds, for example the recently issued 3Y Greek Eurobank CPT, benefiting most. At least until the end of year, we expect the hunt for yield to dominate.
- With only EUR 8bn of new EUR benchmark covered bonds in Oct, FY issuance may not top the FY issuance of EUR 124.5bn seen in 2016, supporting spreads for the remainder of 2017. In 2018, EUR benchmark covered bond redemptions amount to only EUR 88bn, the lowest level since 2008.
- Given ongoing positive net supply by euro area supras, the ECB will likely hold 43% of PSPP eligible bonds by Sept 2018, still below its "current cap" of 50%, even assuming only a slight decrease of the share of supra purchases in total monthly ECB purchases.
- Federal states reported a record budget surplus of EUR 12.7bn from Jan to Sept. Bavaria remains by far the financially strongest federal state. In our view, federal state bonds continue to provide an attractive alternative to Bunds with ultimately the same credit quality.

Dovish ECB led to lower yields and tighter spreads

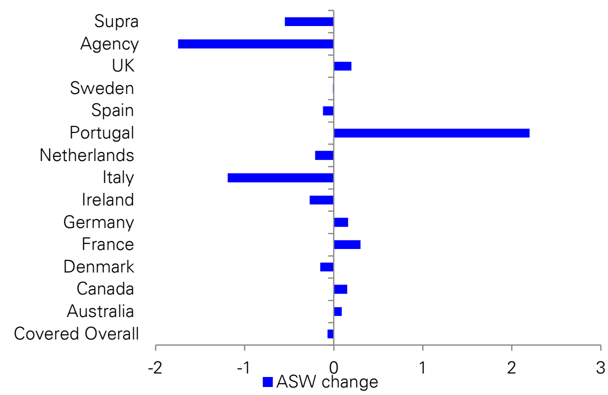
Comparing yields and ASW spreads of iBoxx EUR indices before last week's ECB announcement to extend its QE by at least nine months and EUR 270bn in total, yields of all iBoxx liquid credit indices declined and spreads of most indices are quoted tighter. A dominating share of positive yielding bonds can only be found in higher risk indices, for example, corporates and unsecured financials. In our view, given that the ECB highlighted explicitly QE could be extended beyond Sept 2018 "if necessary", potentially even with a higher monthly volume, at least until the end of 2017, we do not recommend to fight the ECB's will for low yields and tight spreads.

Figure 48: Yield change of iBoxx EUR Covered, agency and supra indices (1 Nov 2017 versus 25 Oct 2017)



Source: Markit

Figure 49: ASW change of iBoxx EUR Covered, agency and supra indices (1 Nov 2017 versus 25 Oct 2017)



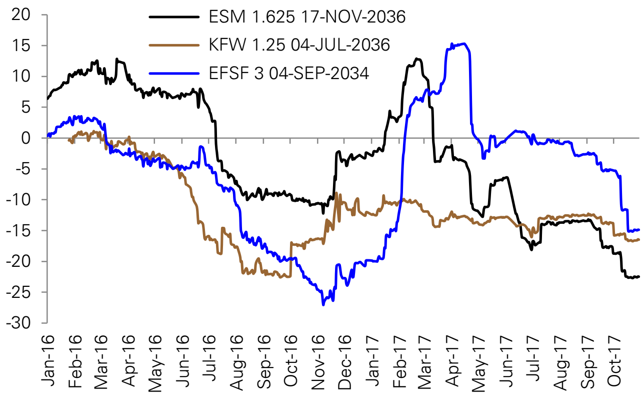
Source: Markit

Higher yielding covered bonds remained well bid

Eurobank conditional pass through (CPT) covered bonds tightened this week. Supported by a two times oversubscribed orderbook with investors "from more than 20 countries", the 3Y B3 rated (Moody's) covered bonds, were priced at a yield of 2.98% on 24 Oct. The bonds were offered at 2.7% this week, 20bp tighter compared to last week. Eurobank is still the highest yielding EUR denominated covered bond in the current market environment. As a comparison, Turkish VAKBN 2021 covered bonds were offered at a yield of 1.95% and Portuguese MONTPI 2022 covered bonds were offered at a yield of 0.67%.

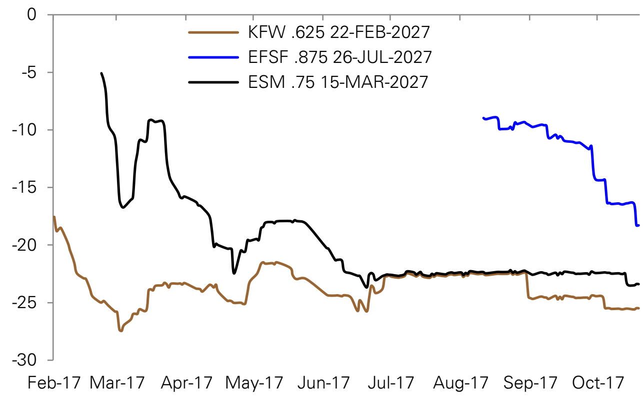
Also in case of EUR denominated supra and agency bonds, the market does not price a serious ECB QE exit yet. For example, EFSF bonds tightened strongly in recent months compared to KfW, particularly in the long end. The ECB announcements last week did not lead to a significant change. At least until the end of year, we expect the hunt for yield to dominate.

Figure 50: ASW spread of KFW Jul 2036 versus ESM Nov 2036 and EFSF Sept 2034



Source: Deutsche Bank

Figure 51: ASW spread of KFW Feb 2027 versus ESM Mar 2027 and EFSF July 2027



Source: Deutsche Bank

EUR benchmark covered bond issuance only EUR 8bn in Oct

In Oct, EUR 8bn of EUR benchmark covered bonds were issued compared to EUR 10bn in Sept and EUR 9.2bn in Oct 2016. YTD issuance amounts to EUR 99.8bn compared to EUR 116.6bn in 2016 YTD, EUR 125.5bn in 2015 YTD and a historical high of EUR 175.7bn in 2011 YTD. While issuance is likely to pick up in the weeks to come, there seems little reason for banks to pre-fund and FY issuance may not top the FY issuance of EUR 124.5bn seen in 2016. With Sparkasse Hannover and Wüstenrot Bausparkasse, two German issuers will tap the market with non-benchmark Pfandbriefe in the near future and likely benefit from strong demand. In 2018, EUR benchmark covered bond redemptions amount to only EUR 88bn, the lowest level since 2008.

Gross ECB CBPP3 purchases at EUR 1.184bn last week

Including EUR 300m of redemptions, the ECB settled EUR 1.184bn of covered bonds on a gross basis last week compared to EUR 921m in the previous week. The ECB's CBPP3 holdings increased by EUR 884m to EUR 235.767bn from EUR 234.883bn. In our view, EUR 350m of primary market purchases last week suggest around EUR 170m of daily purchases in the secondary market, the main message remains that the ECB dominates the market and will likely continue to dominate for the remainder of 2017.

Given that the issue share limit is 70% in case of covered bonds, the ECB's market share is probably mainly interesting regarding secondary market liquidity or the definition of a market. The current market value of iBoxx EUR Covered amounts to EUR 833bn, of which euro area issuers account for 73% (EUR 606bn). We estimate that the ECB's CBPP3 holdings will increase to EUR 258bn as of Sept 2018, bringing the ECB's market share to 43% compared to 38.8% as of Sept 2017, confirming the dominant position of the ECB.

ECB to hold (also) 43% of PSPP eligible supra bonds by Sept 2018

The current PSPP eligible volume of agency and supra bonds (EUR denominated; 1-30Y 364 days), amounts to EUR 573bn and EUR 504bn respectively. We estimate a PSPP eligible volume of EUR 598bn and EUR 537bn for agency and supra bonds respectively as of 30 Sept 2018. The ECB's holdings of supra bonds amounted to EUR 192.7bn as of 30 Sept 2017. We estimate the ECB's holding of supra bonds to increase to EUR 229bn as of 30 Sept 2018. Accordingly, we estimate the share of the ECB in the PSPP eligible volume would account for 43%

compared to a "current cap" of 50%, showing the dominant position of the ECB in the euro area supra market.

Deutsche Bahn - from corporate to "agency", upgraded to AA by Fitch

On 24 Oct, Fitch upgraded Deutsche Bahn's Issuer Default Rating (IDR) to AA from AA-. The upgrade reflects a change in the criteria to rate Bahn to better reflect the entity's policy role. Using its "Public Sector Entity" criteria, Fitch reassessed Bahn's link with the sovereign, the sole owner. Fitch previously rated Deutsche Bahn using its "Corporate Parent and Subsidiary Linkage" criteria, i.e. it categorizes Bahn now as an "agency" instead of a "corporate" previously.

Deutsche Bahn's liabilities are not guaranteed by the German sovereign. However, Fitch assumes support in case of need as very likely. A negative rating action regarding the sovereign will be reflected in Bahn's ratings, assuming that the link between the sovereign and Bahn remains unchanged. In our view, the rating upgrade was overdue and for the time being, bonds of Deutsche Bahn will continue to trade as an "agency".

S&P upgraded CDP to BBB from BBB-

S&P raised its rating on Italy's Cassa Depositi e Prestiti (CDP) to BBB stable from BBB-, reflecting the raising of the rating on Italy (BBB stable) from 27 Oct 2017. S&P highlighted "an almost certain likelihood that the Italian government would provide timely and sufficient extraordinary support to CDP in the event of financial distress".

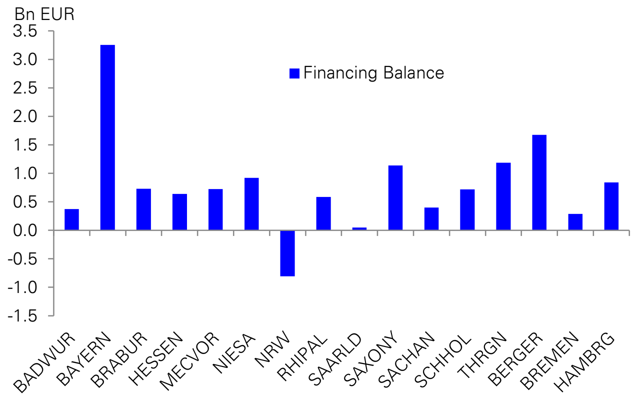
CDP plays a countercyclical role, seeking to cover market gaps and to foster the growth of Italy's economy. CDP is also, by far, the main funding source for regional governments, local authorities, and public-law entities. CDP's exposure to general government risk on the asset side is very high, accounting for some 75% of its loan portfolio. In our view, given its important political role, bonds of CDP can be used as (less liquid) a BTP surrogate.

Federal states with a record EUR 12.7bn budget surplus

With EUR 12.7bn as of 30 Sept (compared to EUR 9.975bn as of 31 Aug), the aggregate budget surplus of German federal states improved by EUR 9.1bn compared to the same period in 2016 and, in our understanding, posted a new record since this data was provided for the first time by the finance ministry in 2001. Tax revenues increased by 6.2% and expenditures by 2.8%. While staff cost increased by 4.6%, interest costs declined by 6.2%.

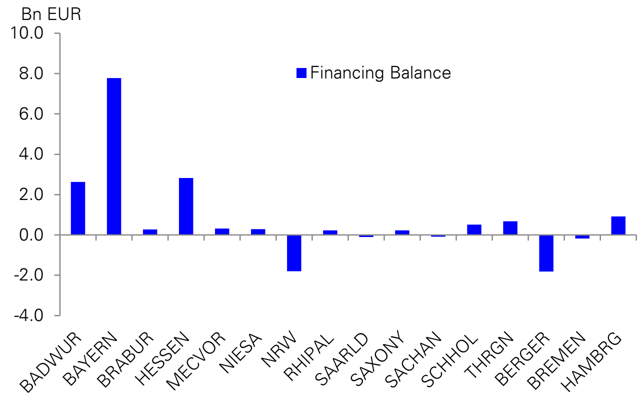
Despite paying EUR 4.5bn into the revenue equalization scheme, Bavaria reported by far the highest surplus of EUR 3.26bn, followed by Berlin with a budget surplus of EUR 1.67bn (but receiving EUR 3.48bn under the revenue equalization system). Particularly when excluding the equalisation payments between federal states, the dominating financial strength of Bavaria becomes obvious, followed by Baden-Württemberg and Hessen. In our view, federal state bonds continue to provide an attractive alternative to Bunds with ultimately the same credit quality.

Figure 52: Financing balance of German federal states until Sept 2017



Source: German Finance Ministry

Figure 53: Financing balance of German federal states until Sept 2017 (excluding revenue equalization)



Source: German Finance Ministry

SNB will not raise rates despite increased mortgage market risks

Fritz Zurbrügg, Vice Chairman of SNB, held a speech at the University of Bern, highlighting that while the word debt has a negative connotation, credit gives rise to positive associations. According to Zurbrügg, an excessive build-up of debt is problematic for the macroeconomy as it means there is a greater likelihood of extensive defaulting on loans, with credit crises often associated with deeper recessions than in a normal economic cycle.

However, Zurbrügg mentioned three reasons why central banks should not raise rates to counter excesses on the credit market as this would not be appropriate from the perspective of price stability and economic activity. First, if central banks were to use the interest rate tool for the purposes of financial stability, they might have to accept departures from the objective of price stability, which would call into question the credibility of the central bank's avowed pursuit of price stability. Second, various analyses indicate that it often takes a very sharp interest rate rise to significantly counteract excesses in the credit market. However, this would have an unwanted and severe dampening effect on the economy. Third, interest rate rises affect the whole economy but excesses often occur only in certain segments of the credit market. Zurbrügg concluded that it seems more expedient to curb excesses in the credit market primarily with instruments other than the interest rate tool.

Please find more details in our separate publications "Covered Bond and Agency Update".

Chartpack

Figure 54: US Treasury yield forecasts

Forecast	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
2Y	1.62	1.87	1.96	2.02	2.08	2.11
5Y	2.01	2.27	2.32	2.35	2.39	2.41
10Y	2.35	2.62	2.69	2.75	2.89	3.03
30Y	2.84	3.13	3.22	3.32	3.52	3.71

Source: Deutsche Bank

Figure 55: USD swap forecasts

Forecast	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
2Y	1.83	2.05	2.19	2.26	2.31	2.37
5Y	2.08	2.42	2.43	2.48	2.50	2.57
10Y	2.33	2.77	2.79	2.87	2.99	3.17
30Y	2.57	3.08	3.16	3.27	3.46	3.69

Source: Deutsche Bank

Figure 56: Germany yield forecasts

Forecasts	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
2Y	-0.75	-0.65	-0.55	-0.55	-0.55	-0.50
5Y	-0.35	-0.25	-0.20	-0.15	-0.10	0.05
10Y	0.36	0.55	0.65	0.70	0.80	0.95
30Y	1.23	1.25	1.30	1.35	1.40	1.55

Source: Deutsche Bank

Figure 57: EUR swaps forecast

Forecasts	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
3M	-0.33	-0.30	-0.30	-0.30	-0.30	-0.30
2Y	-0.20	-0.10	-0.10	-0.10	-0.15	-0.10
5Y	0.20	0.25	0.25	0.25	0.30	0.40
10Y	0.84	0.95	1.00	1.05	1.10	1.25
30Y	1.54	1.60	1.55	1.60	1.65	1.75

Source: Deutsche Bank

Figure 58: France yield forecasts

Forecasts	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
2Y	-0.59	-0.45	-0.40	-0.40	-0.40	-0.35
5Y	-0.11	-0.05	-0.05	0.00	0.05	0.20
10Y	0.75	0.90	0.95	1.00	1.10	1.25
30Y	1.73	1.75	1.80	1.85	1.90	2.05

Source: Deutsche Bank

Figure 59: Italy yield forecasts

Forecasts	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
2Y	-0.31	-0.20	-0.15	-0.15	-0.15	-0.10
5Y	0.55	0.75	0.95	1.05	1.20	1.35
10Y	1.79	2.10	2.40	2.45	2.60	2.75
30Y	2.98	3.25	3.45	3.45	3.60	3.75

Source: Deutsche Bank

Figure 60: Spain yield forecasts

Forecasts	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
2Y	-0.37	-0.20	-0.10	-0.10	-0.10	-0.05
5Y	0.19	0.35	0.45	0.50	0.55	0.70
10Y	1.47	1.70	1.85	2.00	2.20	2.35
30Y	2.73	2.90	3.00	3.05	3.15	3.25

Source: Deutsche Bank

Figure 61: UKT yield forecasts

Forecasts	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
2Y	0.45	0.50	0.55	0.65	0.75	0.80
5Y	0.71	0.80	0.95	1.05	1.15	1.20
10Y	1.26	1.40	1.65	1.75	1.80	1.90
30Y	1.86	2.00	2.20	2.30	2.35	2.40

Source: Deutsche Bank

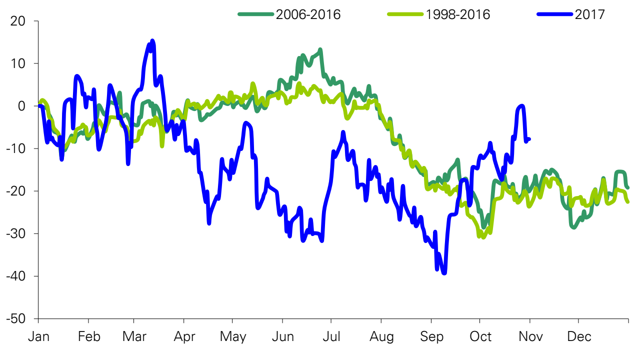
Figure 62: GBP swaps forecast

Forecasts	Current	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
3M	0.52	0.55	0.55	0.55	0.70	0.80
2Y	0.80	0.85	0.90	1.00	1.10	1.15
5Y	1.05	1.10	1.25	1.35	1.45	1.50
10Y	1.32	1.45	1.65	1.80	1.90	2.00
30Y	1.56	1.70	1.90	2.00	2.05	2.10

Source: Deutsche Bank

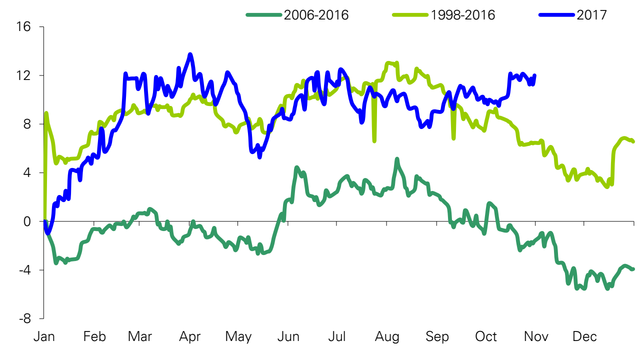
- Forecasts last updated on November 3rd 2017
- These yield forecast could conflict with trade recommendations in the publication

Figure 63: 10Y Treasury yield seasonals (Change since Jan-1)



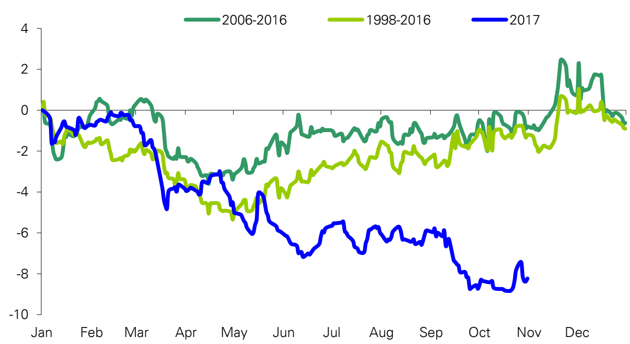
Source: Deutsche Bank

Figure 64: 2Y/10Y slope seasonals (Change since Jan-1)



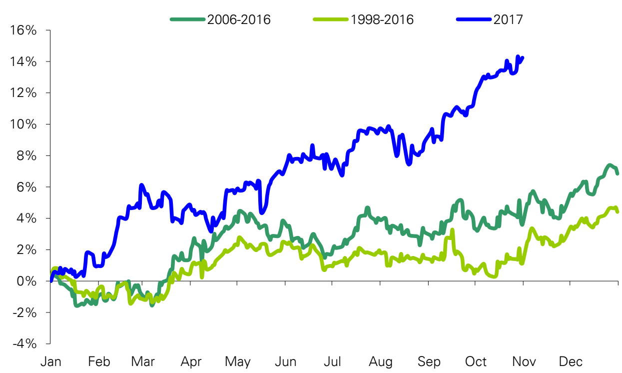
Source: Deutsche Bank

Figure 65: 10Y swap spread seasonals (Change since Jan-1)



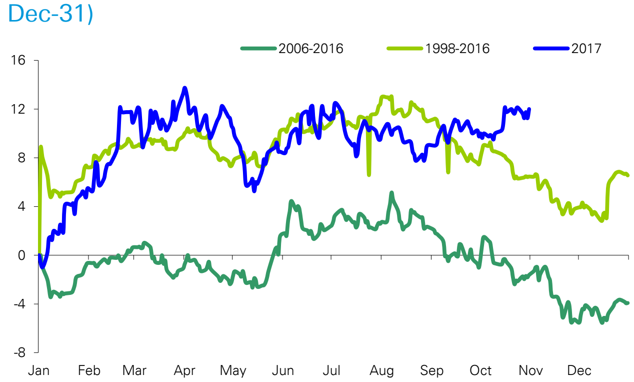
Source:Deutsche Bank

Figure 66: S&P Index seasonals (Change since Dec-31)



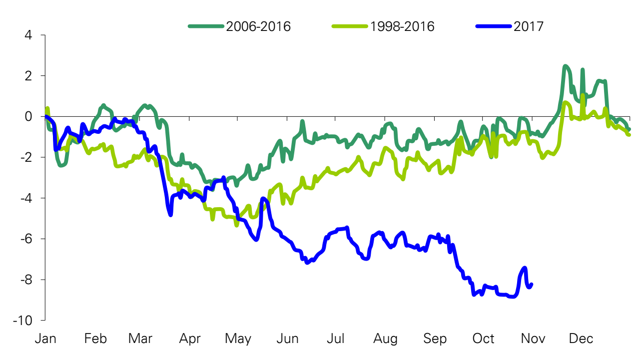
Source:Deutsche Bank

Figure 67: 3M10Y Implied vol seasonals (Change since Dec-31)



Source: Deutsche Bank

Figure 68: 5Y10Y Implied vol seasonals (Change since Dec-31)



Source: Deutsche Bank

Figure 69: Top 15 USD Flatteners

Rank	Trade	1y Carry	Imp. Vol	Ratio	Percentile	Min	25th	Median	75th	Max
1	1Y 5Y7Y	-2.2	7.1	-0.3	74	-1.5	-0.9	-0.6	-0.3	0.1
2	1Y 5Y10Y	-4.5	14.0	-0.3	78	-1.5	-0.9	-0.6	-0.3	0.1
3	1Y 7Y10Y	-2.3	7.2	-0.3	84	-1.4	-0.9	-0.5	-0.4	0.0
4	6M 5Y7Y	-2.4	7.4	-0.3	68	-1.5	-0.8	-0.5	-0.2	0.4
5	3M 20Y25Y	-1.2	3.4	-0.4	73	-2.5	-0.7	-0.5	-0.3	1.7
6	6M 5Y10Y	-5.0	14.1	-0.4	69	-1.4	-0.8	-0.5	-0.3	0.3
7	6M 25Y30Y	-1.1	3.0	-0.4	84	-2.3	-0.8	-0.6	-0.4	2.3
8	6M 7Y10Y	-2.6	7.1	-0.4	73	-1.5	-0.8	-0.5	-0.3	0.3
9	1Y 5Y12Y	-6.2	17.0	-0.4	81	-1.5	-1.0	-0.6	-0.4	0.0
10	1Y 3Y5Y	-3.8	10.5	-0.4	52	-1.4	-0.8	-0.4	0.1	0.7
11	1Y 3Y7Y	-6.0	16.5	-0.4	61	-1.5	-0.8	-0.5	-0.1	0.5
12	1Y 20Y25Y	-1.2	3.3	-0.4	83	-1.5	-0.7	-0.5	-0.4	0.4
13	3M 7Y10Y	-2.6	7.1	-0.4	69	-1.9	-0.8	-0.5	-0.3	0.7
14	1Y 3Y10Y	-8.4	22.4	-0.4	66	-1.5	-0.8	-0.6	-0.2	0.3
15	6M 20Y25Y	-1.2	3.3	-0.4	79	-1.6	-0.7	-0.5	-0.4	0.7

Source: Deutsche Bank

Figure 70: Top 15 USD Steepeners

Rank	Trade	1y Carry	Imp. Vol	Ratio	Percentile	Min	25th	Median	75th	Max
1	3M 1Y2Y	15.3	16.0	1.0	99	-4.2	-1.0	-0.5	-0.1	1.2
2	3M 1Y3Y	24.0	25.4	0.9	99	-3.9	-0.7	-0.4	0.1	1.2
3	3M 1Y5Y	30.4	33.4	0.9	99	-2.9	-0.6	-0.2	0.2	1.6
4	3M 1Y10Y	36.0	40.0	0.9	98	-2.5	-0.3	0.0	0.4	1.9
5	3M 1Y7Y	33.3	37.4	0.9	99	-2.6	-0.4	-0.1	0.3	1.8
6	6M 1Y3Y	18.9	21.8	0.9	99	-3.9	-0.7	-0.4	0.2	1.3
7	6M 2Y3Y	7.4	8.7	0.8	94	-2.2	-0.6	0.0	0.5	1.7
8	3M 2Y3Y	8.7	10.3	0.8	97	-2.9	-0.6	-0.1	0.4	1.9
9	6M 1Y2Y	11.5	13.8	0.8	99	-4.5	-0.8	-0.4	0.0	1.2
10	3M 2Y30Y	29.7	35.7	0.8	74	-1.3	0.2	0.5	0.8	1.8
11	3M 2Y25Y	28.3	34.9	0.8	74	-1.3	0.1	0.5	0.8	1.8
12	3M 2Y20Y	27.1	34.1	0.8	74	-1.4	0.1	0.5	0.8	1.8
13	1Y 1Y2Y	9.1	11.7	0.8	98	-4.6	-0.8	-0.4	0.2	1.5
14	6M 1Y5Y	24.2	31.5	0.8	98	-2.6	-0.5	-0.2	0.3	1.5
15	6M 1Y10Y	29.2	38.2	0.8	91	-1.9	-0.2	0.1	0.5	1.4

Source: Deutsche Bank

Figure 71: Top 15 GBP Flatteners

Rank	Trade	1y Carry	Imp. Vol	Ratio	Percentile	Min	25th	Median	75th	Max
1	6M 5Y7Y	-2.0	10.0	-0.2	53	-3.3	-0.7	-0.2	0.2	4.0
2	3M 25Y30Y	-1.0	4.9	-0.2	56	-8.9	-0.3	-0.2	-0.2	3.2
3	3M 5Y7Y	-2.3	9.9	-0.2	49	-1.4	-0.7	-0.2	0.2	6.9
4	6M 3Y7Y	-6.5	24.7	-0.3	46	-3.8	-0.7	-0.2	0.3	5.0
5	1Y 3Y5Y	-3.4	12.5	-0.3	49	-2.4	-0.7	-0.2	0.3	1.6
6	6M 5Y10Y	-4.8	17.3	-0.3	54	-3.3	-0.7	-0.4	0.0	2.8
7	6M 3Y5Y	-4.5	16.0	-0.3	41	-4.0	-0.6	-0.1	0.3	5.3
8	1Y 3Y7Y	-4.9	17.0	-0.3	51	-2.1	-0.7	-0.3	0.2	1.8
9	3M 20Y30Y	-2.5	8.2	-0.3	52	-6.5	-0.4	-0.3	-0.2	6.7
10	6M 3Y10Y	-9.3	30.0	-0.3	49	-3.7	-0.8	-0.3	0.2	4.0
11	6M 7Y10Y	-2.8	8.6	-0.3	57	-3.2	-0.7	-0.4	-0.2	1.9
12	1Y 5Y7Y	-1.5	4.7	-0.3	49	-2.0	-0.6	-0.3	0.1	1.2
13	6M 20Y25Y	-1.4	4.1	-0.3	53	-2.6	-0.4	-0.3	-0.2	1.4
14	3M 3Y7Y	-7.4	22.4	-0.3	41	-1.4	-0.6	-0.1	0.3	8.3
15	1Y 2Y5Y	-7.7	23.2	-0.3	39	-2.7	-0.7	-0.1	0.4	1.7

Source: Deutsche Bank

Figure 72: Top 15 GBP Steepeners

Rank	Trade	1y Carry	Imp. Vol	Ratio	Percentile	Min	25th	Median	75th	Max
1	1Y 7Y15Y	6.6	5.5	1.2	95	-0.4	0.5	0.7	0.9	2.0
2	1Y 10Y15Y	3.9	3.3	1.2	92	-0.2	0.6	0.7	1.0	2.0
3	1Y 5Y20Y	10.4	9.4	1.1	92	-0.6	0.4	0.6	0.9	2.0
4	1Y 5Y30Y	12.6	11.4	1.1	95	-0.5	0.4	0.6	0.8	1.9
5	1Y 5Y25Y	11.6	10.6	1.1	91	-0.6	0.4	0.6	0.9	1.9
6	3M 1Y3Y	21.8	20.3	1.1	100	-11.3	-0.7	-0.3	-0.1	1.2
7	3M 1Y2Y	15.3	14.7	1.0	99	-9.8	-0.7	-0.3	-0.1	1.5
8	1Y 7Y20Y	8.9	8.6	1.0	87	-0.2	0.5	0.7	0.9	1.9
9	1Y 7Y25Y	10.1	10.1	1.0	90	-0.2	0.5	0.7	0.8	1.9
10	1Y 7Y30Y	11.0	11.1	1.0	93	-0.2	0.4	0.6	0.8	1.8
11	1Y 5Y15Y	8.1	8.4	1.0	85	-0.8	0.3	0.6	0.9	2.0
12	3M 2Y3Y	6.5	7.0	0.9	93	-14.7	-0.5	-0.1	0.3	5.2
13	1Y 7Y10Y	2.7	2.9	0.9	91	-0.6	0.3	0.4	0.7	1.9
14	3M 1Y5Y	26.9	29.5	0.9	98	-10.0	-0.6	-0.2	0.1	1.1
15	1Y 3Y30Y	15.9	17.7	0.9	77	-1.1	0.1	0.6	0.9	2.0

Source: Deutsche Bank

Carry is calculated for next 3 months and shown in annualized form.

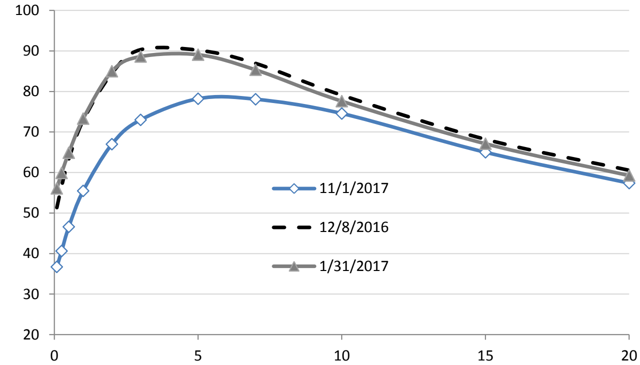
Volatility is extracted from swaptions prices.

Percentile statistics are calculated from a 10 year history.

Figure 73: USD DGX and DVX across different market regimes

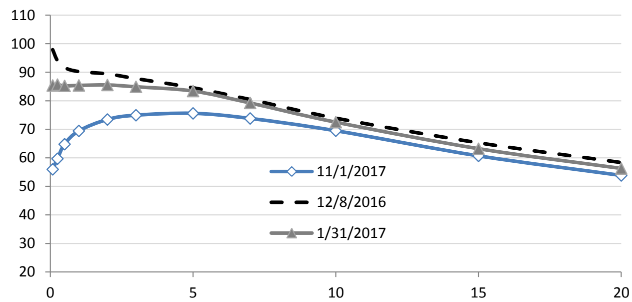
Source: Deutsche Bank

Figure 74: Term structure of 2Y USD vol



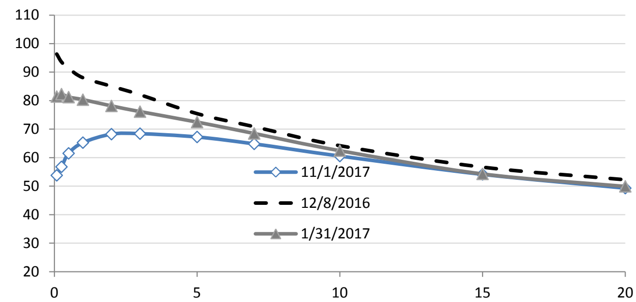
Source: Deutsche Bank

Figure 75: Term structure of 10Y USD vol



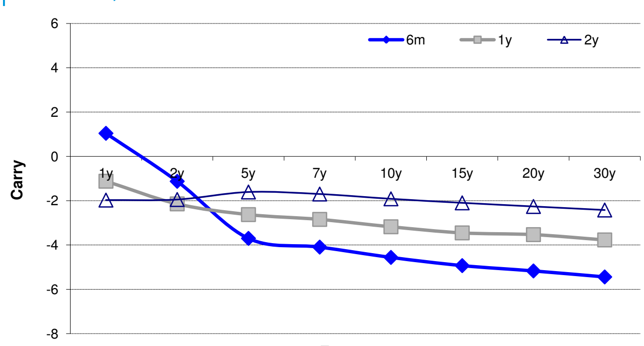
Source: Deutsche Bank

Figure 76: Term structure of 30Y USD vol



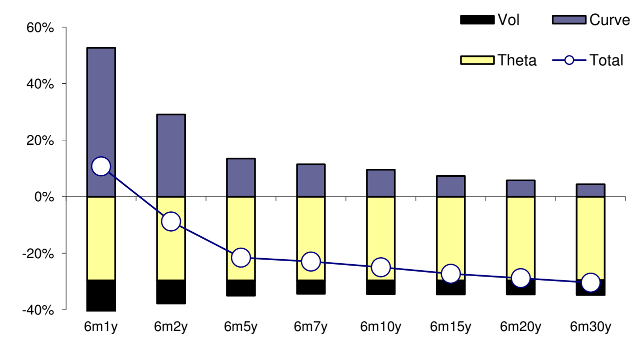
Source: Deutsche Bank

Figure 77: 3M carry across different expiries (ATMF receivers)



Source: Deutsche Bank

Figure 78: Breakdown of 3M carry for 6M expiries (% premium)

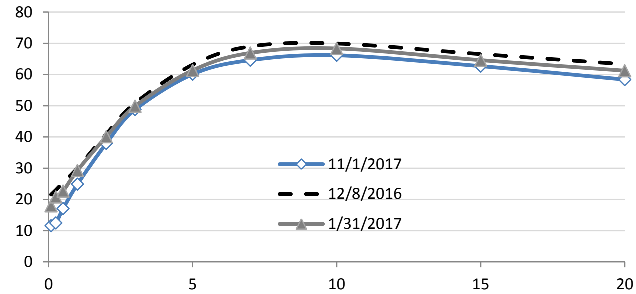


Source: Deutsche Bank

Figure 79: EUR DGX and DVX across different market regimes

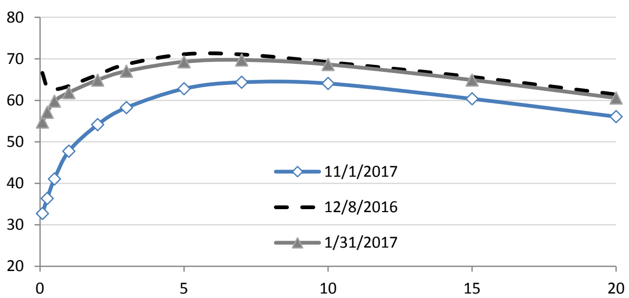
Source: Deutsche Bank

Figure 80: Term structure of 2Y EUR vol



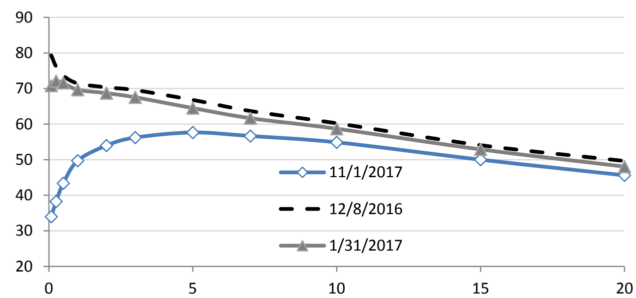
Source: Deutsche Bank

Figure 81: Term structure of 10Y EUR vol



Source:Deutsche Bank

Figure 82: Term structure of 30Y EUR vol



Source: Deutsche Bank

Figure 83: US Treasury Coupon Auction Calendar

Ticker/Coupon/Maturity	Date	Time of Auction (NY)	Tap/New Issue	Size	10Y DV01 Equivalent
T TBA 11/20	November 07, 2017	1:00 PM	New Issue	$24B	$8.0B
T TBA 11/27	November 08, 2017	1:00 PM	New Issue	$23B	$23.0B
T TBA 11/47	November 09, 2017	1:00 PM	New Issue	$15B	$34.2B

Source: Deutsche Bank, US Treasury

Figure 84: European Auction Calendar

Country	Bond details	Date	Time of Auction (LDN)	Tap/New Issue	Size	10Y DV01 Equivalent
Austria	09/22 & 04/27	7-Nov-17	10:00 AM	Tap	EUR 1,150 mn	EUR 942 mn
Germany	ILB (04/30)	7-Nov-17	10:30 AM	Tap	EUR 500 mn	EUR 750 mn
Germany	10/22	8-Nov-17	10:30 AM	Tap	EUR 3,000 mn	EUR 1,560 mn
Portugal	04/27	8-Nov-17	10:30 AM	Tap	EUR 1,250 mn	EUR 1,250 mn
Ireland	IRISH	9-Nov-17	10:00 AM	Tap	EUR 500 mn	EUR 500 mn

Source: Deutsche Bank, State Treasuries

Contacts

Name	Title	Telephone	Email
London			
Francis Yared	Global Head of Rates Research	+44 (20) 7545 4017	francis.yared@db.com
Jack Di-Lizia	Euroland Strategy/UK Strategy	+44 (20) 7545 1865	jack.di-lizia@db.com
Markus Heider	Global Inflation Strategy/Euroland Strategy	+44 (20) 7545 2167	markus.heider@db.com
Soniya Sadeesh, CFA	Regulation and Money Markets	+44 (20) 7547 3091	soniya.sadeesh@db.com
New York			
Aleksandar Kocic	Derivatives	+1 (212) 250 0376	aleksandar.kocic@db.com
Stuart Sparks	US Strategy/USD Rates	+1 (212) 250 0332	stuart.sparks@db.com
Steven Zeng, CFA	Treasury and Money Markets	+1 (212) 250 9373	steven.zeng@db.com
Laura Desplans, PhD	US Inflation Strategy	+1 (212) 250 7583	laura.desplans@db.com
Sydney			
Augusto Medeiros	Head of Dollar Bloc Rates and Credit Research	+61 (2) 8258 3092	augusto.medeiros@db.com
Kenneth Crompton	Dollar Bloc Strategy	+61 (2) 8258 1361	kenneth.crompton@db.com
Tokyo			
Makoto Yamashita, CMA	Japan Strategy	+81 (3) 5156 6622	makoto.yamashita@db.com
Zurich			
Bernd Volk	Covered Bonds/SSA	+41 (44) 227 3710	bernd.volk@db.com

Appendix 1

Important Disclosures

*Other information available upon request

*Prices are current as of the end of the previous trading session unless otherwise indicated and are sourced from local exchanges via Reuters, Bloomberg, and other vendors. Other information is sourced from Deutsche Bank, subject companies, and other sources. For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr. Aside from within this report, important conflict disclosures can also be found at https://gm/db.com/equities under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s). In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Francis Yared, Laura Desplans, Jack Di-Lizia, Markus Heider, Aleksandar Kocic, Soniya Sadeesh, Stuart Sparks, Bernd Volk, Steven Zeng

Additional Information

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). Though the information herein is believed to be reliable and has been obtained from public sources believed to be reliable, Deutsche Bank makes no representation as to its accuracy or completeness. Hyperlinks to third-party websites in this report are provided for reader convenience only. Deutsche Bank neither endorses the content nor is responsible for the accuracy or security controls of these websites.

If you use the services of Deutsche Bank in connection with a purchase or sale of a security that is discussed in this report, or is included or discussed in another communication (oral or written) from a Deutsche Bank analyst, Deutsche Bank may act as principal for its own account or as agent for another person.

Deutsche Bank may consider this report in deciding to trade as principal. It may also engage in transactions, for its own account or with customers, in a manner inconsistent with the views taken in this research report. Others within Deutsche Bank, including strategists, sales staff and other analysts, may take views that are inconsistent with those taken in this research report. Deutsche Bank issues a variety of research products, including fundamental analysis, equity-linked analysis, quantitative analysis and trade ideas. Recommendations contained in one type of communication may differ from recommendations contained in others, whether as a result of differing time horizons, methodologies or otherwise. Deutsche Bank and/or its affiliates may also be holding debt or equity securities of the issuers it writes on. Analysts are paid in part based on the profitability of Deutsche Bank AG and its affiliates, which includes investment banking, trading and principal trading revenues.

Opinions, estimates and projections constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank provides liquidity for buyers and sellers of securities issued by the companies it covers. Deutsche Bank research analysts sometimes have shorter-term trade ideas that are consistent or inconsistent with Deutsche Bank's existing longer term ratings. Trade ideas for equities can be found at the SOLAR link at http://gm.db.com. A SOLAR idea represents a high conviction belief by an analyst that a stock will outperform or underperform the market and/or sector delineated over a time frame of no less than two weeks. In addition to SOLAR ideas, the analysts named in this report may from time to time discuss with our clients, Deutsche Bank salespersons and Deutsche Bank traders, trading strategies or ideas that reference catalysts or events that may have a near-term or medium-term impact on the market price of the securities discussed in this report, which impact may be directionally counter to the analysts' current 12-month view of total return or investment return as described herein. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof if any opinion, forecast or estimate contained herein changes or subsequently becomes inaccurate. Coverage and the frequency of changes in market conditions and in both general and company specific economic prospects make it difficult to update research at defined intervals. Updates are at the sole discretion of the coverage analyst concerned or of the Research Department Management and as such the majority of reports are published at irregular intervals. This report is provided for informational purposes only and does not take into account the particular investment objectives, financial situations, or needs of individual clients. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Target prices are inherently imprecise and a product of the analyst ' s judgment. The financial instruments discussed in this report may not be suitable for all investors and investors must make their own informed investment decisions. Prices and availability of financial instruments are subject to change without notice and investment transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Unless otherwise indicated, prices are current as of the end of the previous trading session, and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank, subject companies, and in some cases, other parties.

The Deutsche Bank Research Department is independent of other business areas divisions of the Bank. Details regarding our organizational arrangements and information barriers we have to prevent and avoid conflicts of interest with respect to our research is available on our website under Disclaimer found on the Legal tab.

Macroeconomic fluctuations often account for most of the risks associated with exposures to instruments that promise to pay fixed or variable interest rates. For an investor who is long fixed rate instruments (thus receiving these cash flows), increases in interest rates naturally lift the discount factors applied to the expected cash flows and thus cause a loss. The longer the maturity of a certain cash flow and the higher the move in the discount factor, the higher will be the loss. Upside surprises in inflation, fiscal funding needs, and FX depreciation rates are among the most common adverse macroeconomic shocks to receivers. But counterparty exposure, issuer creditworthiness, client segmentation, regulation (including changes in assets holding limits for different types of investors), changes in tax policies, currency convertibility (which may constrain currency conversion, repatriation of profits and/or the liquidation of positions), and settlement issues related to local clearing houses are also important risk factors to be considered. The sensitivity of fixed income instruments to macroeconomic shocks may be mitigated by indexing the contracted cash flows to inflation, to FX depreciation, or to specified interest rates – these are common in emerging markets. It is important to note that the index fixings may -- by construction -- lag or mis-measure the actual move in the underlying variables they are intended to track. The choice of the proper fixing (or metric) is particularly important in swaps markets, where floating coupon rates (i.e., coupons indexed to a typically short-dated interest rate reference index) are exchanged for fixed coupons. It is also important to acknowledge that funding in a currency that differs from the currency in which coupons are denominated carries FX risk. Naturally, options on swaps (swaptions) also bear the risks typical to options in addition to the risks related to rates movements.

Derivative transactions involve numerous risks including, among others, market, counterparty default and illiquidity risk. The appropriateness or otherwise of these products for use by investors is dependent on the investors' own circumstances including their tax position, their regulatory environment and the nature of their other assets and liabilities, and as such, investors should take expert legal and financial advice before entering into any transaction similar to or inspired by the contents of this publication. The risk of loss in futures trading and options, foreign or domestic, can be substantial. As a result of the high degree of leverage obtainable in futures and options trading, losses may be incurred that are greater than the amount of funds initially deposited. Trading in options involves risk and is not suitable for all investors. Prior to buying or selling an option investors must review the "Characteristics and Risks of Standardized Options", at http://www.optionsclearing.com/about/publications/character-risks.jsp. If you are unable to access the website please contact your Deutsche Bank representative for a copy of this important document.

Participants in foreign exchange transactions may incur risks arising from several factors, including the following: (i) exchange rates can be volatile and are subject to large fluctuations; (ii) the value of currencies may be affected by numerous market factors, including world and national economic, political and regulatory events, events in equity and debt markets and changes in interest rates; and (iii) currencies may be subject to devaluation or government imposed exchange controls which could affect the value of the currency. Investors in securities such as ADRs, whose values are affected by the currency of an underlying security, effectively assume currency risk.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. Aside from within this report, important conflict disclosures can also be found at https://gm.db.com/equities under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

Deutsche Bank (which includes Deutsche Bank AG, its branches and all affiliated companies) is not acting as a financial adviser, consultant or fiduciary to you, any of your agents (collectively, "You" or "Your") with respect to any information provided in the materials attached hereto. Deutsche Bank does not provide investment, legal, tax or accounting advice, Deutsche Bank is not acting as Your impartial adviser, and does not express any opinion or recommendation whatsoever as to any strategies, products or any other information presented in the materials. Information contained herein is being provided solely on the basis that the recipient will make an independent assessment of the merits of any investment decision, and it does not constitute a recommendation of, or express an opinion on, any product or service or any trading strategy.

The information presented is general in nature and is not directed to retirement accounts or any specific person or account type, and is therefore provided to You on the express basis that it is not advice, and You may not rely upon it in making Your decision. The information we provide is being directed only to persons we believe to be financially sophisticated, who are capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies, and who understand that Deutsche Bank has financial interests in the offering of its products and services. If this is not the case, or if You are an IRA or other retail investor receiving this directly from us, we ask that you inform us immediately.

United States: Approved and/or distributed by Deutsche Bank Securities Incorporated, a member of FINRA, NFA and SIPC. Analysts located outside of the United States are employed by non-US affiliates that are not subject to FINRA regulations.

Germany: Approved and/or distributed by Deutsche Bank AG, a joint stock corporation with limited liability incorporated in the Federal Republic of Germany with its principal office in Frankfurt am Main. Deutsche Bank AG is authorized under German Banking Law and is subject to supervision by the European Central Bank and by BaFin, Germany ’ s Federal Financial Supervisory Authority.

United Kingdom: Approved and/or distributed by Deutsche Bank AG acting through its London Branch at Winchester House, 1 Great Winchester Street, London EC2N 2DB. Deutsche Bank AG in the United Kingdom is authorised by the Prudential Regulation Authority and is subject to limited regulation by the Prudential Regulation Authority and Financial Conduct Authority. Details about the extent of our authorisation and regulation are available on request.

Hong Kong: Distributed by Deutsche Bank AG, Hong Kong Branch or Deutsche Securities Asia Limited.

India: Prepared by Deutsche Equities India Pvt Ltd, which is registered by the Securities and Exchange Board of India (SEBI) as a stock broker. Research Analyst SEBI Registration Number is INH000001741. DEIPL may have received administrative warnings from the SEBI for breaches of Indian regulations.

Japan: Approved and/or distributed by Deutsche Securities Inc.(DSI). Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, Type II Financial Instruments Firms Association and The Financial Futures Association of Japan. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. We may also charge commissions and fees for certain categories of investment advice, products and services. Recommended investment strategies, products and services carry the risk of losses to principal and other losses as a result of changes in market and/or economic trends, and/or fluctuations in market value. Before deciding on the purchase of financial products and/or services, customers should carefully read the relevant disclosures, prospectuses and other documentation. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless Japan or "Nippon" is specifically designated in the name of the entity. Reports on Japanese listed companies not written by analysts of DSI are written by Deutsche Bank Group's analysts with the coverage companies specified by DSI. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan. Target prices set by Deutsche Bank's equity analysts are based on a 12-month forecast period.

Korea: Distributed by Deutsche Securities Korea Co.

South Africa: Deutsche Bank AG Johannesburg is incorporated in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003298/10).

Singapore: by Deutsche Bank AG, Singapore Branch or Deutsche Securities Asia Limited, Singapore Branch (One Raffles Quay #18-00 South Tower Singapore 048583, +65 6423 8001), which may be contacted in respect of any matters arising from, or in connection with, this report. Where this report is issued or promulgated in Singapore to a person who is not an accredited investor, expert investor or institutional investor (as defined in the applicable Singapore laws and regulations), they accept legal responsibility to such person for its contents.

Taiwan: Information on securities/investments that trade in Taiwan is for your reference only. Readers should independently evaluate investment risks and are solely responsible for their investment decisions. Deutsche Bank research may not be distributed to the Taiwan public media or quoted or used by the Taiwan public media without written consent. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation to trade in such securities/instruments. Deutsche Securities Asia Limited, Taipei Branch may not execute transactions for clients in these securities/instruments.

Qatar: Deutsche Bank AG in the Qatar Financial Centre (registered no. 00032) is regulated by the Qatar Financial Centre Regulatory Authority. Deutsche Bank AG - QFC Branch may only undertake the financial services activities that fall within the scope of its existing QFCRA license. Principal place of business in the QFC: Qatar Financial Centre, Tower, West Bay, Level 5, PO Box 14928, Doha, Qatar. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available to Business Customers, as defined by the Qatar Financial Centre Regulatory Authority.

Russia: This information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

Kingdom of Saudi Arabia: Deutsche Securities Saudi Arabia LLC Company, (registered no. 07073-37) is regulated by the Capital Market Authority. Deutsche Securities Saudi Arabia may only undertake the financial services activities that fall within the scope of its existing CMA license. Principal place of business in Saudi Arabia: King Fahad Road, Al Olaya District, P.O. Box 301809, Faisaliah Tower - 17th Floor, 11372 Riyadh, Saudi Arabia.

United Arab Emirates: Deutsche Bank AG in the Dubai International Financial Centre (registered no. 00045) is regulated by the Dubai Financial Services Authority. Deutsche Bank AG - DIFC Branch may only undertake the financial services activities that fall within the scope of its existing DFSA license. Principal place of business in the DIFC: Dubai International Financial Centre, The Gate Village, Building 5, PO Box 504902, Dubai, U.A.E. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available to Professional Clients, as defined by the Dubai Financial Services Authority.

Australia: Retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Please refer to Australian specific research disclosures and related information at https://australia.db.com/australia/content/research-information.html

Australia and New Zealand: This research is intended only for "wholesale clients" within the meaning of the Australian Corporations Act and New Zealand Financial Advisors Act respectively.

Additional information relative to securities, other financial products or issuers discussed in this report is available upon request. This report may not be reproduced, distributed or published without Deutsche Bank's prior written consent.

David Folkerts-Landau
Group Chief Economist and Global Head of Research

Raj Hindocha
Global Chief Operating Officer
Research

Michael Spencer
Head of APAC Research
Global Head of Economics

Steve Pollard
Head of Americas Research
Global Head of Equity Research

Anthony Klarman
Global Head of
Debt Research

Paul Reynolds
Head of EMEA
Equity Research

Dave Clark
Head of APAC
Equity Research

Pam Finelli
Global Head of
Equity Derivatives Research

Andreas Neubauer
Head of Research - Germany

Spyros Mesomeris
Global Head of Quantitative
and QIS Research

International locations

Deutsche Bank AG
Deutsche Bank Place
Level 16
Corner of Hunter & Phillip Streets
Sydney, NSW 2000
Australia
Tel: (61) 2 8258 1234

Deutsche Bank AG
Mainzer Landstrasse 11-17
60329 Frankfurt am Main
Germany
Tel: (49) 69 910 00

Deutsche Bank AG
Filiale Hongkong
International Commerce Centre,
1 Austin Road West,Kowloon,
Hong Kong
Tel: (852) 2203 8888

Deutsche Securities Inc.
2-11-1 Nagatacho
Sanno Park Tower
Chiyoda-ku, Tokyo 100-6171
Japan
Tel: (81) 3 5156 6770

Deutsche Bank AG London
1 Great Winchester Street
London EC2N 2EQ
United Kingdom
Tel: (44) 20 7545 8000

Deutsche Bank Securities Inc.
60 Wall Street
New York, NY 10005
United States of America
Tel: (1) 212 250 2500